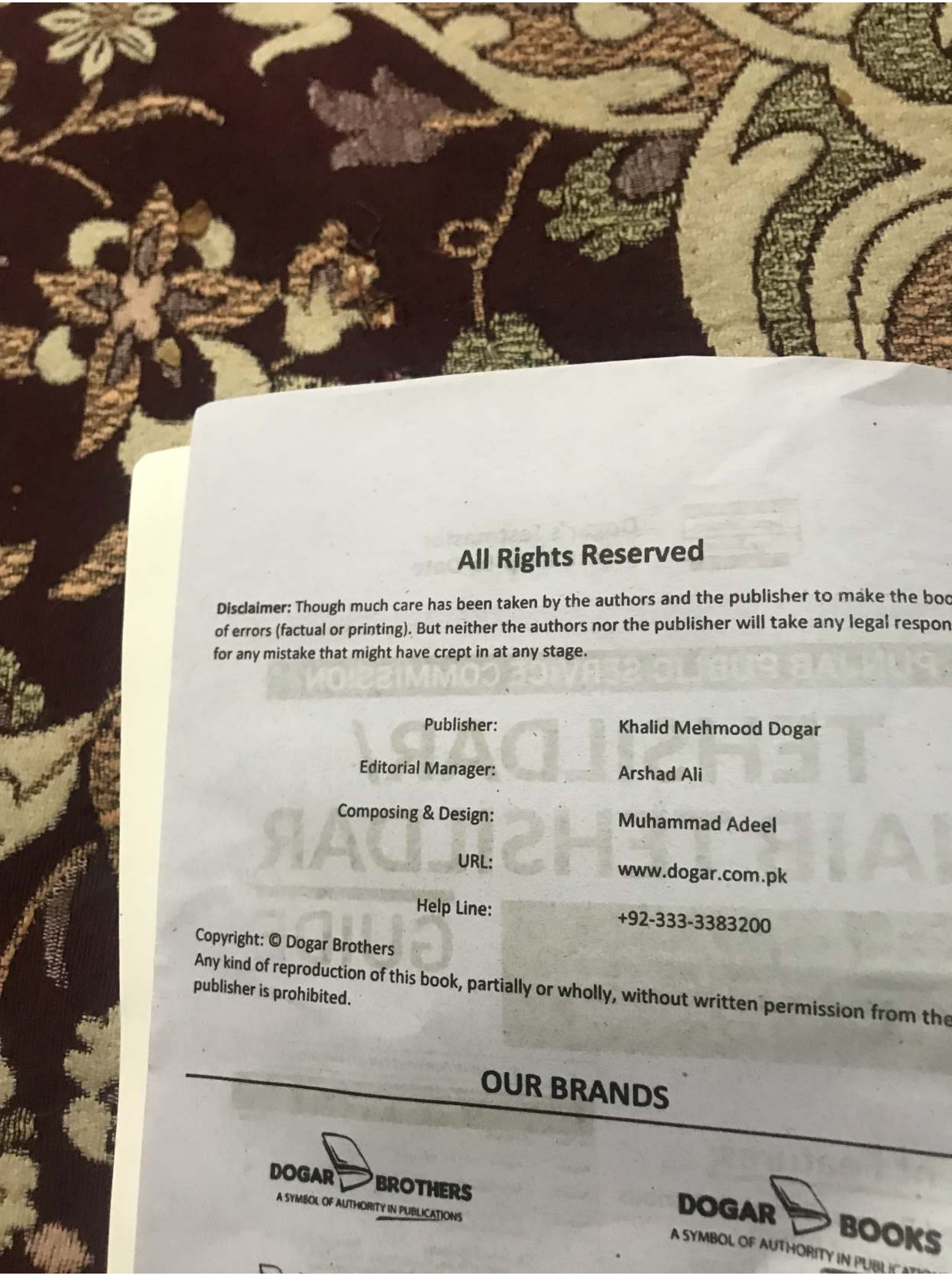


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# How to Use this Book?

The **Tehsildar / Naib Tehsildar Guide** is the go-to source to prepare for the PPSC Tehsildar / Naib Tehsildar Exam. It has been designed on the basis of the syllabus and Past Papers of the Test to provide the students with useful preparation material. The aim of this book is to aid students for the upcoming examinations in the best possible way. Solving these sample papers will allow you to understand the nature of the questions along with providing you a clearer idea of your preparation so far.

تحصیلدار / نائب تحصیلدار گائیڈ پی پی ایس سی میں تحصیلدار اور نائب تحصیلدار کے ٹیسٹ کی تیاری کے لئے تیاری کا بہترین ذریعہ ہے۔ اس کتاب کو سلیبس اور سابقہ پرچہ جات کی بنیاد پر تیار کیا گیا ہے تاکہ طالب علموں کو ٹیسٹ کی تیاری کے لئے مواد فراہم کیا جاسکے۔ اس کتاب کا مقصد طلباء کی آئندہ آنے والے امتحانات میں بہترین تیاری کے لئے مدد کرنا ہے۔ سیمپل پیپرز کو حل کرنے سے آپ کو پیپرز میں آنے والے سوالات کی نوعیت کو سمجھنے کا موقع ملے گا۔ اور اس کے ساتھ ساتھ آپ کو ٹیسٹ کے لئے آپکی تیاری کا بھی اندازہ ہو گا۔

**The book includes the following items:**

- ***Detailed Notes*** have been added to the book in order to provide the students with content that will help them prepare for the upcoming exam.
- ***Test Information*** regarding PPSC Tehsildar/Naib Tehsildar Exam has been added to the book including the courses offered, eligibility criteria and Test details.
- ***Model Test Papers*** are included in the book, which have been designed on the basis of PPSC Past Papers, incorporating the variety of question types that are expected in the test.

**کتاب میں درج ذیل مواد شامل کیا گیا ہے۔**

- کتاب میں تفصیلی نوٹس کو شامل کیا گیا ہے تاکہ طلباء کو ایسا مواد فراہم کیا جاسکے جو کہ آنے والے امتحان کی تیاری میں ان کی مدد کر سکے۔
- پی پی ایس سی تحصیلدار اور نائب تحصیلدار کے ٹیسٹ کے متعلق معلومات، اہلیت، اور ٹیسٹ کے بارے میں دیگر تفصیلات کو بھی کتاب میں شامل کیا گیا ہے۔
- کتاب میں ماڈل ٹیسٹ پیپرز کو شامل کیا گیا ہے جن کو سابقہ پرچہ جات کو سامنے رکھ کر بنایا گیا ہے اور اس میں تمام قسم کے سوالات کو شامل کیا گیا ہے جو کہ پیپر میں آسکتے ہیں۔

Students are advised to prepare further from the following books:

- Bilal Dogar's Testmaster General Knowledge
- B.A Course Books
- F.A Course Books

- آن لائن لرننگ ماڈیول (https://tabiracademy.com) میں دیا گیا ہے۔ جس کے ذریعے آپ ہزاروں سوالوں کی آن لائن پریکٹس کر سکتے ہیں۔ آن لائن لرننگ ماڈیول کے لیے معلومات اگلے صفحہ پر دی گئی ہے۔

یہ تمام مواد جو اس کتاب میں دیا گیا ہے یہ ہمارے بہترین اندازے پر مشتمل ہے جو ہم نے سابقہ پرچہ جات کو مد نظر رکھ کر بنایا ہے۔ تاہم جو مضامین سلیبس میں شامل ہیں۔ وہ بہت وسیع احاطے کی ضرورت رکھتے ہیں۔ آپ کو مشورہ دیا جاتا ہے کہ اس کتاب پر مکمل انحصار نہ کریں بلکہ ہر طرف سے معلومات حاصل کرنے کی کوشش کریں۔ اس کتاب کا مقصد آپ کو امتحانی نقطہ نظر سے تیار کرنا ہے۔

# ONLINE LEARNING MODULE

## What is tabir Academy?

**Tabir Academy** is an innovative online learning platform that revolutionizes education. It works by providing a dynamic and engaging learning experience, incorporating various features to make learning more accessible and efficient for students. Key aspects of how Tabir Academy works include:

### Tabir Academy Unique Features:

1. **Interactive Learning**: Tabir Academy offers an interactive and engaging approach to learning, where students actively participate in their education.
2. **Progress Tracking**: The platform allows students to monitor their progress, making it easy to see their strengths and areas that need improvement.
3. **Level-Based Learning**: Students progress through different levels, where each level presents more challenging material as they master the previous one.
4. **Question Reinforcement**: Incorrectly answered questions are revisited until students understand the concepts thoroughly, ensuring knowledge retention and mastery.
5. **Personalized Learning**: Tabir Academy encourages students to add concepts they wish to revisit later to a personalized learning box.
6. **Time-Based Challenges**: Students can challenge themselves by answering questions within a given time frame, helping them prepare for exams and reduce anxiety.
7. **Learning Box Tool**: The Learning Box Tool serves as a virtual repository for learning materials, making it easier to organize and revisit concepts.

In summary, Tabir Academy redefines online education by making it fun, easier, and faster for students to learn, while also emphasizing personalized and progressive learning.

### Steps:

1. Login to www.tabiracademy.com by creating an account
2. Search your desired course
3. Write the voucher code given with this book
4. You are ready to start your preparation

Good luck!

# SELECTION PROCEDURE / ADVERTISEMENT

## BOARD OF REVENUE, PUNJAB

| SR. NO. | BASIC SCALE, NAME, NUMBER OF POSTS, CASE NO | MINIMUM QUALIFICATION / EXPERIENCE | AGE | GENDER, DOMICILE & PLACE OF POSTING | SYLLABUS FOR WRITTEN EXAMINATION |
|---|---|---|---|---|---|
| 179 | 08-RJ/2023<br>(BS-16)<br>**TEHSILDAR/ CONSOLIDATION OFFICER/ HILL TORRENT OFFICER/ READER TO MEMBERS BOARD OF REVENUE**<br>14- POSTS<br>(Regular Basis)<br>(Including 01 post reserved for Minority Quota) | i) Graduation(Second Division) from a University recognized by Higher Education Commission, and<br>ii) Computer literate, | **Male:** 21 to 28 + 5 =33 years<br>**Female:** 21 to 28 + 8 =36 years<br>Age and sex of the transgender will be based on the content of their CNIC.<br>**REMAINING PRE-CONDITION:**<br>The cutoff date for determining the eligibility as far as age is concerned shall be the 1st January 2023. However, the candidate must fulfill and complete all other pre-conditions/qualifications for the examination on or before the Closing date as given in this Advertisement. The candidates will produce the original certificates at the time of interview to authenticate their claim in the application form | **GENDER:**<br>Male, Female & Transgender<br>**DOMICILE:**<br>All Punjab Basis<br>**PLACE OF POSTING:**<br>All over Punjab | The written examination will be conducted comprising the following four Papers = Total 400 Marks |

| Sr. No. | Papers | Marks |
|---|---|---|
| Paper-1 | English Essay & Composition | 100 |
| Paper-2 | Urdu Essay & Composition | 100 |
| Paper-3 | MCQ type paper of 90 minutes duration containing questions relating to:<br>a. General Knowledge. Approx. (70%) Pakistan Studies, Current Affairs, Islamic Studies (General Knowledge for Non-Muslim candidates), Geography, Basic Mathematics, English, Urdu, Everyday Science.<br>b. Basic Computer Studies. Approx. (30%) including M.S office, Electronic Record Keeping, Internet, Email etc. | 100 |
| Paper-4 | MCQ type paper of 90 minutes duration on Revenues Laws | 100 |

**Note:** The candidates, who qualify written Examination, will be called for Psychological Assessment and Interview.

| | |
|---|---|
| Psychological Assessment and Viva Voce | 200 |

**IMPORTANT NOTES:** i) Negative Marking shall be made and 0.25 marks shall be deducted for each incorrect answer in the MCQ papers.
ii) A candidate shall have to obtain 40% marks in each paper and 50% marks in the aggregate to qualify for interview. Thereafter, a candidate shall also secure 50% marks in the interview to be held eligible for final merit list of successful candidates.

1. Please read the "General Instructions" regarding Application Fee, Written Test, Interview on PPSC website www.ppsc.gop.pk before applying online.
2. Employees of Semi Government and Autonomous Bodies of Federal Government or Provincial Government and those of Local Bodies are not entitled to age concession for the period of their service in such organization.
3. In case a candidate claims that his/her qualification is equivalent to the prescribed qualification, he/she will be required to submit equivalence certificate of his/her foreign/local qualification, issued by the Competent Authority of HEC/PMDC/PMC/PEC & QEDC of concerned Administrative Department, which will be accepted by the Commission as Final, at the time of interview or whenever asked by the Commission. If a candidate fails to submit Equivalence Certificate issued by the Competent Authority at the time of interview or whenever asked by the Commission, his/her candidature shall be cancelled.
4. In case, a candidate claims experience of private firm / entity, he / she must bring proof at the time of interview that the firm /entity is registered with SECP, Registrar of Firms or any other Regulatory Authority, failing which his / her application shall be rejected. Candidate must provide proof of registration showing that the concerned private entity had the status of a registered body during the period of experience claimed by the candidate.
5. The candidates will ensure that after applying for a particular post they will immediately apply for Departmental Permission Certificate/NOC in their concerned Department(s) and provide the Departmental Permission Certificate/NOC at the time of interview (if called).
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7. The candidates will ensure that they will provide marks obtained / total marks or percentage certificate of all degrees, issued by the Competent Authority, at the time of interview. CGPA is not acceptable.
8. No information, whatsoever, shared by anyone other than on the PPSC's website, is authentic, therefore, candidates must not trust any such information.
9. The Shorthand Test and Typing & Proficiency Test, if required, will ONLY be held at Lahore.
10. In case of variation (increase/decrease) in number of post(s) by the concerned department, No Fresh Applications will be invited.
11. ***Applicants are advised to deposit fees online by using the following mediums ONLY i.e. ATMs, Mobile Phone Banking, Internet Banking, Over the counter (by visiting the nearest "1Link Member Banks Branches), Jazz Cash, Easy Paisa, U Paisa, and other available micro-finance banks. For details, please visit PPSC website at www.ppsc.gop.pk***

Important Instructions

**Closing Date for Submission of Online Applications**

⇩

**19 October 2023**

**AFZAAL AHMAD, SECRETARY PPSC**

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# GENERAL KNOWLEDGE SOLVED PAPERS

## Solved Paper 01

1. 16th East Asia Summit 2021 was held in:
   A. Philippines B. Brunei
   C. Thailand **D. Jakarta**

**Subject:** Current Affairs
**Topic:** World Organizations
**Concept Note:** The 18th East Asia Summit was held on 07 September 2023 in Jakarta

2. Who is 46th President of America?
   A. George W. Bush B. Barack Obama
   C. Donald Trump **D. Joe Biden**

**Subject:** Current Affairs
**Topic:** Heads of States
**Concept Note:** Joe Biden assumed his office on 20-Jan-2021. He also served as vice president of USA from 20-Jan-09 to 20 – Jan – 2017.

3. 'Make America Great Again' Slogan was given by:
   A. George W. Bush **B. Donald Trump**
   C. Barack Obama D. Bill Clinton

**Concept Note:** He was the 45th President of the US. He assumed office on January 20, 2017. Current President of US is Joe Biden.

4. When was the PRSSI Satellite launched?
   A. 10 July 2018 B. 14 August 2018
   C. **9 July 2018** D. 7 June 2018

**Subject:** Current Affairs
**Topic:** Famous Events
**Concept Note:** The Pakistan Remote Sensing Satellite-I is a dual-purpose Earth observational and optical satellite. Pakistan Remote Sensing Satellite-1 was launched from China's Jiuquan Satellite Centre on 9 July 2018.

5. The World Environment Day is celebrated on:
   A. 7 April **B. 5 June**
   C. 22 March D. 23 April

**Subject:** General Knowledge
**Topic:** Famous Days
**Concept Note:** World Environment Day is celebrated on the 5th of June every year, and is the United Nation's principal vehicle for encouraging awareness and action for the protection of our environment.

6. For how long Chabahar port is handed over to India?
   A. 18 months B. 20 Years
   C. **10 Years** D. 16 months

**Subject:** General Knowledge
**Topic:** Major Events
**Concept Note:** India started interacting with Iran on Chabahar Port around 2003 but a major push was received in the second half of 2014, resulting in the signing of an MoU between the two countries for the development of Chabahar Port in May 2015. This MoU translated into a formal 10-year contract for Equipping and Operating the Chabahar Port, which was executed on May 23, 2016, during Prime Minister Narendra Modi's visit to Tehran.

7. Olympics 2022 were held in
   A. **Beijing** B. Paris
   C. Tokyo D. Shanghai

Subject: General Knowledge
Topic: Olympics
**Concept Note:** Beijing Olympics 2022 were held from 04-feb-2022 to 20-feb-2022 in China (Beijing).

The 2020 Summer Olympics, Officially were held from 24 July to 9 August 2020 in Tokyo, Japan.

2018 Olympic winter Games were held in Pyeongchang, South Korea.

8. Which of the following is not a SAARC Member Country?
   A. India B. Nepal
   C. Bhutan D. **Myanmar**

**Subject:** World Organizations
**Topic:** SAARC
**Concept Note:** The member states are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. SAARC was founded by seven states in 1985. Afghanistan joined SAARC as its eighth member state in April 2007

9. Who was the 2nd governor General of Pakistan?
   A. Malik Ghulam Muhammad
   **B. Khawaja Nazimuddin**
   C. Muhammad Ali Jinnah
   D. Iskandar Mirza

**Subject:** Pakistan History
**Topic:** Famous Personalities
**Concept Note:** Khawaja Nazimuddin was the second Governo General of Pakistan, and later the second Prime Minister Pakistan. He remained Governor-General from 14 Septemb 1948 – 17 October 1951. His tenure as the PM was from October 1951 – 17 April 1953.

10. MAO School was founded in:
    A. 1857 **B. 1875**
    C. 1862 D. 1871

**Subject:** Pakistan Movement
**Topic:** Famous Events
**Concept Note:** The foundations of M.A. O. (Mohamme Anglo-Oriental) School were laid in 1875 by Sir Syed Ahmad K aiming at bringing the Muslims out of the abysmal darknes ignorance which had been made their destiny after the Wa Independence 1857.

11. Who was the ambarssador of Hindu-Muslim Unity?
    A. Allama Iqbal
    B. Liaqat Ali Khan
    C. Sir Syed Ahmad Khan
    D. **Muhammad Ali Jinnah**

**Subject:** Pakistan Movement
**Topic:** Quaid-e-Azam
**Concept Note:** The Lucknow Pact of 1916 was seen a "important step forward in achieving Hindu–Muslim u during the era of the Indian independence move Muhammad Ali Jinnah advocated Hindu–Muslim unity in years of his political career. Gopal Krishna Gokhale state Jinnah "has true stuff in him, and that freedom from all sec prejudice which will make him the best ambassador of H Muslim Unity".

12. According to Islamic law, wife's share in property is:
    A. ½ B. 1/3
    C. **1/8** D. 1/4

## SYLLABUS FOR WRITTEN EXAMINATION

The written examination will be conducted comprising the following four Papers = Total 400 Marks

| Sr. No. | Papers | Marks |
|---|---|---|
| Paper-1 | English Essay & Composition | 100 |
| Paper-2 | Urdu Essay & Composition | 100 |
| Paper-3 | MCQ type paper of 90 minutes duration containing questions relating to:<br><br>a. General Knowledge, Pakistan Studies, Current Affairs, Islamic Studies (General Knowledge for Non-Muslim candidates), Geography, Basic Mathematics, English, Urdu, Everyday Science. **Approx. (70%)**<br>b. Basic Computer Studies including M.S office, Electronic Record Keeping, Internet, Email etc. **Approx. (30%)** | 100 |
| Paper-4 | MCQ type paper of 90 minutes duration on Revenues Laws | 100 |

**Subject:** Islamic Studies
**Topic:** Inheritance

**Concept Note:** According to Muslim Personal Law, in the event of the death of her husband, a widow gets the one-eighth share (in case there are children) but will get one-fourth share (if there are no children).

13. The revelation of Quran started in which city:
A. Madinah B. **Makkah**
C. Taif D. Jeddah

**Subject:** Islamic Studies
**Topic:** Quran

**Concept Note:** The revelation of the Quran began in 610 A. D. when the angel Jibrail appeared to Muhammad (PBUH) in the cave Hira near Mecca, reciting to him the first verses of Surah Al-Alaq.

14. Prophet Muhammad (PBUH) was blessed with Prophet hood at the age of :
A. 30 years B. 35 years
C. **40 years** D. 24 years

**Subject:** Islamic Studies
**Topic:** Prophet (PBUH)

**Concept Note:** When the Prophet was 40 years of age, Archangel Gabriel descended to him, while he sat in the cave of Hira (Ghare Hira), in the al-Noor mountain near the city of Makkah. Gabriel, the Angel of Revelation, said, 'Recite!' From there, the revelation of Quran started, which lasted for 23 years.

15. Zakat can be given to:
A. Freeing Captives B. Zakat Collectors
C. Needy D. **All of these**

**Subject:** Islamic Studies
**Topic:** Zakat

**Concept Note:**
Zakat can be given to:
The Masakeen - 'the destitute'
Fuqara - 'the needy or poor'
Amil' Zakat - 'the alms collectors'
Fi sabiLillah - 'in the path of God'
Gharimun - 'people burdened with debt'
Ibn as Sabil - 'the wayfarers'
Riqab - 'people in bondage or slavery'
Mu'Allaf - 'those who have inclined towards Islam'

16. The position of an element in the periodic table is determined by its _____ number:
A. Neutron B. **Proton**
C. Electron D. Neutrino

**Subject:** General Science
**Topic:** Chemistry

**Concept Note:** The periodic table is a tabular display of the chemical elements, which are arranged by atomic number (Proton Number), electron configuration, and recurring chemical properties. The structure of the table shows periodic trends. The seven rows of the table, called periods, generally have metals on the left and nonmetals on the right. The 18 columns, called groups, contain elements with similar chemical behaviours.

17. The salinity of seawater is determined by the amount of common salt (Sodium chloride) in what amount of seawater:
A. **1 Kg** B. 2 Kg
C. 3 Kg D. 4 Kg

**Subject:** General Science
**Topic:** Chemistry

**Concept Note:** On average, seawater in the world's oceans has a salinity of approximately 3.5%, or 35 parts per thousand. This means that for every 1 Kg (1000 mL) of seawater there are 35 grams of salts dissolved in it.

18. Which planet has a Great Red Spot on it?
A. Mercury B. Venus
C. Mars D. **Jupiter**

**Subject:** General Science
**Topic:** Solar System

**Concept Note:** Great Red Spot, a long-lived enormous storm system on the planet Jupiter and the most conspicuous feature of its visible cloud surface. It is generally reddish in colour, slightly oval in shape, and approximately 16,350 km (10,159 miles) wide—large enough to engulf Earth.

19. One light year equals:
A. 9.0 x 10^12 km B. 9.5 x 10^11km
C. 9.56 x 10^12 m D. **9.46 x 10^12 km**

**Subject:** General Science
**Topic:** Universe

**Concept Note:** The light-year is a unit of length used to express astronomical distances and measures about 9.46 trillion Kilometers (9.46 x 10^12 km). As defined by the International Astronomical Union (IAU), a light-year is the distance that light travels in a vacuum in one Julian year (365.25 days). Because it includes the word "year", the term light-year is sometimes misinterpreted as a unit of time

20. Biosensor is used to measure:
A. Hemoglobin B. Platelets
C. **Blood glucose level** D. Blood pressure

**Subject:** General Science
**Topic:** Biology

**Concept Note:** A biosensor is an analytical device, used for the detection of a chemical substance that combines a biological component with a physicochemical detector.

21. Einstein's famous equation which states that mass and energy are interchange is:
A. F=ma B. **E=mc^2**
C. S=vt D. V=IR

**Subject:** General Science
**Topic:** Physics

**Concept Note:** Albert Einstein (14 March 1879 – 18 April 1955) was a German-born theoretical physicist who developed the theory of relativity. He is best known for his mass–energy equivalence formula E = mc^2, which has been dubbed "the world's most famous equation". He received the Nobel Prize in Physics in 1921.

22. Which of the following is the SI unit of electric current?
A. Electron Volt B. Candela
C. Volt D. **Ampere**

**Subject:** General Science
**Topic:** Physics

**Concept Note:** The ampere, often shortened to "amp", is the base unit of electric current in the International System of Units. It is named after André-Marie Ampère, French mathematician and physicist, considered the father of electrodynamics.

23. Who is the foreign Minister of Russia?
A. Justin Trudeau

B. **Sergey Lavrov**
C. Muhammad Jawad Zarif
D. Chrystia Freeland

**Subject:** Current Affairs
**Topic:** Famous Personalities

**Concept Note:** Sergey lavrov assumed office in March 2004. Previously, he served as the Permanent Representative of Russia to the United Nations. His wife's name is Maria Lavrova

24. International Women's Day is celebrated each year on:
A. **8 March** B. 22 April
C. 8 July D. 1 May

**Subject:** General Knowledge
**Topic:** Famous Days

**Concept Note:** International Women's Day is annually held on March 8 to celebrate women's achievements throughout history and across nations. It is also known as the United Nations (UN) Day for Women's Rights and International Peace.

25. The theme of international forest day 2022 was:
A. Save trees B. Say no to plastic
C. **Forest and Sustainable production and Consumption**
D. Save life

**Subject:** General Knowledge
**Topic:** Famous days

**Concept Note:** The United Nations General Assembly proclaimed 21 March the International Day of Forests (IDF) in 2012. The Day celebrates and raises awareness of the importance of all types of forests. On each International Day of Forests, countries are encouraged to undertake local, national and international efforts to organize activities involving forests and trees, such as tree planting campaigns. The theme for each International Day of Forests is chosen by the Collaborative Partnership on Forests.

26. Comets have orbits:
A. **Around the Sun with orbital period**
B. Around the Earth with orbital period
C. Around the Moon with orbital period
D. Around the planets with orbital period

**Subject:** General Science
**Topic:** Universe

**Concept Note:** Comets go around the Sun in a highly elliptical orbit. They can spend hundreds and thousands of years out in the depths of the solar system before they return to Sun at their perihelion. Like all orbiting bodies, comets follow Kepler's Laws - the closer they are to the Sun, the faster they move.

27. Mania of stealing things is known as:
A. Demonomania B. **Kleptomania**
C. Graphomania D. Dipsomania

**Subject:** General Knowledge
**Topic:** Scientific Terms

**Concept Note:** Kleptomania (klep-toe-MAY-nee-uh) is the recurrent inability to resist urges to steal items that you generally don't really need and that usually have little value. Kleptomania is a rare but serious mental health disorder.

28. The currency of Russia is:
A. Yen B. **Russian Ruble**
C. Dollar D. Euro

**Subject:** General Knowledge
**Topic:** Currencies

**Concept Note:** The ruble is the currency of the Russian Empire and of the Soviet Union (as the Soviet ruble). However, today only Russia, Belarus and Transnistria use currencies with the same name.

29. Allama Iqbal was born in:
A. Karachi B. Lahore
C. Islamabad D. **Sialkot**

**Subject:** Pakistan Movement
**Topic:** Allama Iqbal

**Concept Note:** He was born on 9 November 1877 in Sialkot, and died on 21 April 1938 (aged 60) in Lahore. Iqbal's house is still located in Sialkot and is recognized as Iqbal's Manzil and is open for visitors. His other house where he lived most of his life and died, is in Lahore, named as Javed Manzil. His museum is located on Allama Iqbal Road near Lahore Railway Station, Punjab, Pakistan.

30. Khewra Salt mine is located in which province:
A. **Punjab** B. Sindh
C. Khyber Pakhtunkhwa
D. Balochistan

**Subject:** Pakistan Geography
**Topic:** Mines

**Concept Note:** The Khewra Salt Mine is located in Khewra, north of Pind Dadan Khan, an administrative subdivision of Jhelum District. The mine is located in the Salt Range, an outer range of the Himalaya Mountains. It is Pakistan's largest, and the world's 2nd largest salt mine.

31. How many special economic zones are present in CPEC?
A. 10 B. 11
C. 9 D. 12

**Subject:** General Knowledge
**Topic:** CPEC

**Concept Note:**
1 Rashakai Economic Zone , M-1, Nowshera
2 China Special Economic Zone Dhabeji
3 Bostan Industrial Zone
4 Allama Iqbal Industrial City (M3), Faisalabad
5 ICT Model Industrial Zone, Islamabad
6 Development of Industrial Park on Pakistan Steel Mills Land at Port Qasim near Karachi
7 Special Economic Zone at Mirpur, AJK
8 Mohmand Marble City
9 Moqpondass SEZ Gilgit-Baltistan

32. Which of the following planet comes closest to the Earth at some point in time?
A. Mercury B. Mars
C. Jupiter D. **Venus**

**Subject:** General Science
**Topic:** Solar System

33. The President of 1st Constituent Assembly of Pakistan was:
A. Allama Iqbal B. **Muhammad Ali Jinnah**
C. Liaqat Ali Khan D. Iskander Mirza

**Subject:** Pakistan History
**Topic:** Heads of State

**Concept Note:** The inaugural session of the first constituent assembly of Pakistan was held in Karachi in August 1947. Mr. Mandal was elected as temporary chairman of Constituent Assembly of Pakistan. Subsequently Jinnah was selected

president of the Constituent Assembly of Pakistan, on 11th August 1947.

34. The main political parties in the elections of 1970 were:
A. PMLN B. PPP
C. Awami League D. **Both B and C**

**Subject:** Pakistan History
**Topic:** Elections

**Concept Note:** The 1970 elections were a fierce contest between two socialist parties, the Pakistan People's Party (PPP) and Awami League. The Awami League was the sole major party in East Pakistan, while in the four provinces of West Pakistan, the PPP was the major force. The Awami League won a landslide victory by winning an absolute majority of 160 seats in the National Assembly and 298 of the 310 seats in the Provincial Assembly of East Pakistan. The PPP won only 81 seats in the National Assembly, but were the winning party in Punjab and Sindh.

35. President Donald Trump and Kim Jong-un met in:
A. Russia B. Canada
C. America D. **Singapore**

**Subject:** Current Affairs
**Topic:** Summits

**Concept Note:** The 2018 North Korea–United States Singapore Summit, commonly known as Singapore Summit was a summit meeting between North Korean Chairman Kim Jong-un and U.S. President Donald Trump, held at the Capella Hotel, Sentosa, Singapore on June 12, 2018. This was the first-ever meeting between leaders of North Korea and the United States.

36. ASEAN headquarters are located in:
A. **Jakarta, Indonesia**
B. Tokyo, Japan
C. New York, London
D. Geneva, Switzerland

**Subject:** World Organizations
**Topic:** ASEAN

**Concept Note:** Association of South-East Asian Nations (ASEAN) is an intergovernmental organization of ten countries of South-East Asia. It was founded on 8th August 1967 and has its headquarters in Jakarta, Indonesia.

37. The International Day for the elimination of violence against Women is celebrated on:
A. 8th March B. **25th November**
C. 9th March D. 21st November

**Subject:** General Knowledge
**Topic:** Famous Days

**Concept Note:** The UNGA has designated November 25 as the International Day for the Elimination of Violence Against Women (Resolution 54/134). The premise of the day is to raise awareness of the fact that women around the world are subject to rape, domestic violence and other forms of violence; furthermore, one of the aims of the day is to highlight that the scale and true nature of the issue is often hidden.

38. The current GDP of Pakistan is:
A. 390.68 Billion$ B. 350.68 Billion$
C. **376.49 Billion$** D. 300.68 Billion$

**Subject:** Current Affairs
**Topic:** Economy
**Concept Note:** When this question appeared in the paper, the GDP of Pakistan was 376.49 Billion$. Please consult the current data to update yourself.

39. Jamal Khashoggi was a:
A. **Journalist** B. Industrialist
C. Politician D. Lawyer

**Subject:** Current Affairs
**Topic:** Famous Personalities

**Concept Note:** Jamal Ahmad Khashoggi was a Saudi Arabian dissident, author, columnist for The Washington Post, and a general manager and editor-in-chief of Al-Arab News Channel who was assassinated at the Saudi consulate in Istanbul on 2 October 2018 by agents of the Saudi government

40. Very high temperature is measured by:
A. Thermometer B. **Pyrometer**
C. Sphygmomanometer D. Biometer

**Subject:** General Knowledge
**Topic:** Scientific Devices

**Concept Note:** Pyrometer is device for measuring relatively high temperatures, such as are encountered in furnaces. Most pyrometers work by measuring radiation from the body whose temperature is to be measured.

41. The lifespan of white blood cells is:
A. **13 to 20 days** B. 13 to 20 hours
C. 13 to 20 minutes D. 13 to 20 seconds

**Subject:** General Science
**Topic:** Biology

**Concept Note:** White blood cells are the cells of the immune system that are involved in protecting the body against both infectious disease and foreign invaders. All white blood cells are produced in the bone marrow. The lifespan of white blood cells ranges from 13 to 20 days. They are destroyed in the lymphatic system.

42. Which planet revolves fastest around the Sun?
A. Earth B. Mars
C. Jupiter D. **Mercury**

**Subject:** General Science
**Topic:** Solar System

**Concept Note:** Mercury is the fastest planet, which speeds around the sun at 47.87 km/s.

43. Nature of sound waves is:
A. Mechanical B. Electromagnetic
C. Transverse D. **Longitudinal**

**Subject:** General Science
**Topic:** Physics

**Concept Note:** Sound is a longitudinal wave that is created by a vibrating object, such as a guitar string, the human vocal cords, or the diaphragm of a loudspeaker. Moreover, sound can be created or transmitted only in a medium, such as a gas, liquid, or solid. As we will see, the particles of the medium must be present for the disturbance of the wave to move from place to place. Sound cannot exist in a vacuum.

44. Water of which reservoir will freeze last:
A. River B. **Sea**
C. Canal D. Dam

**Subject:** General Science
**Topic:** Chemistry

**Concept Note:** The density of ocean water is determined by its salinity (or salt content) and temperature. The saltier and/or colder the water is, the denser it is. Salt water is most dense at its freezing point, unlike fresh water, which is most dense at about 3.9°C (39.0°F). Oceans are highly stratified: deep ocean

water is heavy, and the lighter water is on top. Salty water freezes below 0°C (32°F): this is why salt is used to melt the snow or ice on a road pavement. The saltier the sea, the lower its freezing point. Ocean water with a typical salinity of 35 parts per thousand freezes only at −1.8°C (28.9°F)

45. Nanometer is equivalent to?
A. $1x10^{-6}$ B. $1x10^{-3}$
C. **$1x10^{-9}$** D. $1x10^{-12}$

**Subject:** General Science
**Topic:** Physics
**Concept Note:**

**TABLE 1.5 Selected Prefixes Used in the Metric System**

| Prefix | Abbreviation | Meaning | Example |
|---|---|---|---|
| Giga | G | $10^9$ | 1 gigameter (Gm) = $1 \times 10^9$ m |
| Mega | M | $10^6$ | 1 megameter (Mm) = $1 \times 10^6$ m |
| Kilo | k | $10^3$ | 1 kilometer (km) = $1 \times 10^3$ m |
| Deci | d | $10^{-1}$ | 1 decimeter (dm) = 0.1 m |
| Centi | c | $10^{-2}$ | 1 centimeter (cm) = 0.01 m |
| Milli | m | $10^{-3}$ | 1 millimeter (mm) = 0.001 m |
| Micro | μ* | $10^{-6}$ | 1 micrometer (μm) = $1 \times 10^{-6}$ m |
| Nano | n | $10^{-9}$ | 1 nanometer (nm) = $1 \times 10^{-9}$ m |
| Pico | p | $10^{-12}$ | 1 picometer (pm) = $1 \times 10^{-12}$ m |
| Femto | f | $10^{-15}$ | 1 femtometer (fm) = $1 \times 10^{-15}$ m |

*This is the Greek letter mu (pronounced "mew").

# Solved Paper 02

1. Seven rounds around the Kaaba is called:
A. Hajj B. Umrah
C. **Tawaf** D. Ziyarat

**Subject:** Islamic Studies
**Topic:** Hajj

2. The color of blood is due to the presence of:
A. Glucose B. **Haemoglobin**
C. Plasma D. Platelets

**Subject:** General Science
**Topic:** Biology
**Concept Note:** Within the red blood cells there is a protein called haemoglobin. Each haemoglobin protein is made up of subunits called hemes, which are what give blood its red color. More specifically, the hemes can bind iron molecules, and these iron molecules bind oxygen. The blood cells are red because of the interaction between iron and oxygen.

3. Which statement is true about Sound?
A. **It does not travel through vacuum**
B. It does not travel through water
C. It does not travel through atmosphere
D. It does not travel through lead

**Subject:** General Science
**Topic:** Physics
**Concept Note:** Sound is a longitudinal wave that is created by a vibrating object, such as a guitar string, the human vocal cords, or the diaphragm of a loudspeaker. Moreover, sound can be created or transmitted only in a medium, such as a gas, liquid, or solid. As we will see, the particles of the medium must be present for the disturbance of the wave to move from place to place. Sound cannot exist in a vacuum.

4. Which of the following is added to ice in cold countries to prevent slippery surfaces?
A. soda B. **salt**
C. lemon D. water

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** Salting roads works by altering the freezing point of water. Water with a higher salt content has a lower freezing point than water with less salinity. Salting icy roads and walkways lowers the freezing point of the water that forms ice which leads to melting and prevents falling snow or rain from being able to freeze.

5. Rabia Basri was born in:
A. Iran B. Afghanistan
C. Turkey D. **Iraq**

**Subject:** Islam
**Topic:** Famous Personalities

6. Battle of Karbala took place in:
A. 60 AH B. **61 AH**
C. 62 AH D. 63 AH

**Subject:** Islamic Studies
**Topic:** Famous Battles

7. Which Prophet was a Carpenter?
A. Hazrat Haroon (A. S)
B. Hazrat Musa (A. S)
C. **Hazrat Zakariya (A. S)**
D. Hazrat Yaqoob (A. S)

8. How many daughters did prophet Muhammad (PBUH) had?
A. 2 B. 3
C. **4** D. 5

**Subject:** Islamic Studies
**Topic:** Prophet Muhammad (PBUH)
**Concept Note:** The names of Prophet's daughters were:
1-Zaynab (R.A)
2-Ruqayyah (R.A)
3-Umm-e-Kulthoom (R.A)
4-Fatimah (R.A)

9. Number of verses in first surah of Holy Quran:
A. 5 B. 6
C. **7** D. 9

**Subject:** Islam
**Topic:** Quranic Surahs
**Concept Note:** Surah Al-Fatihah is the first Sūrah of the Holy Quran.

10. Theme of Earth Day 2018 was:
A. **end plastic pollution** B. save trees
C. conserve water D. none

**Subject:** General Knowledge
**Topic:** Famous Days
**Concept Note:** Earth Day, observed on April 22, is significant as it's a day of political action and civic participation towards preserving the planet. Earth day theme 2022 is Invest in our planet.

11. The current Secretary of State of the USA is:
A. Justin Trudeau B. **Antoney Blinken**
C. Mike Pompeo D. Chrystia Freeland

**Subject:** Current Affairs
**Topic:** Famous Personalities

**Concept Note:** Blinken is 71st secretary of state of US. He assumed his office on 26-Jan-2021. Also served as deputy National Security Advisor from 2013 to 2015 and Deputy secretary of State from 2015 to 2017.

12. One light year equals:
    A. 9.5x10^6 Km
    B. 9.5x10^9 Km
    C. **9.5x10^12 Km**
    D. None of these

**Subject:** General Science
**Topic:** Universe

**Concept Note:** The light-year is a unit of length used to express astronomical distances and measures about 9.46 trillion kilometres (9.46 x 10^12 km). As defined by the International Astronomical Union (IAU), a light-year is the distance that light travels in a vacuum in one Julian year (365.25 days). Because it includes the word "year", the term light-year is sometimes misinterpreted as a unit of time.

13. The current Secretary General of the UN is:
    **A. Antonio Guterres**
    B. Justin Trudeau
    C. Mike Pompeo
    D. Chrystia Freeland

**Subject:** World Organizations
**Topic:** UN

**Concept Note:** António Guterres GCC GCL is a Portuguese politician and diplomat who is serving as the 9th Secretary-General of the United Nations. Previously, he was the United Nations High Commissioner for Refugees between 2005 and 2015.

14. International Human Rights Day is celebrated on
    A. 25 December
    B. 11 September
    C. **10 December**
    D. 8 March

**Subject:** General Knowledge
**Topic:** Famous Days

**Concept Note:** This date was chosen to honour the United Nations General Assembly's adoption and proclamation, on 10 December 1948, of the Universal Declaration of Human Rights (UDHR).

15. 5th Regional Comprehensive Economic Partnership (RCEP) summit was held in 2018 at:
    **A. Tokyo, Japan**
    B. Geneva, Switzerland
    C. London, England
    D. New York, America

**Subject:** Current Affairs
**Topic:** Summits

**Concept Note:** The Regional Comprehensive Economic Partnership (RCEP) is a proposed free trade agreement (FTA) between the ten member states of the Association of Southeast Asian Nations (ASEAN) (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam) and its six FTA partners (China, Japan, India, South Korea, Australia and New Zealand).

16. The Asian Infrastructure Investment Bank headquarters are located in:
    A. Tokyo, Japan
    B. Geneva, Switzerland
    C. London, England
    D. **Beijing, China**

**Subject:** General Knowledge
**Topic:** Headquarters

**Concept Note:** The Asian Infrastructure Investment Bank (AIIB) is a multilateral development bank headquartered in Beijing. Its mission is to improve social and economic outcomes in its region, Asia, and beyond.

17. What is the name of Indonesian currency?
    A. Euro
    B. Rupee
    C. **Indonesian Rupiah**
    D. Lira

**Subject:** General Knowledge
**Topic:** Currencies

**Concept Note:** The currency code for the Indonesian rupiah is IDR. The name "Rupiah" is derived from the Sanskrit word for silver, rupyaka.
Lira is the currency of Turkey.
The rupee is the common name for the currencies of India, Pakistan, Indonesia, Maldives(Rufiyaa), Mauritius, Nepal, Seychelles, and Sri Lanka.

18. Who is the current Iranian President?
    **A. Ebrahim Raisi**
    B. Barham Salih
    C. Hassan Rouhani
    D. Saddam Hussain

**Subject:** Current Affairs
**Topic:** Heads of States

**Concept Note:** He is the 8th President of Iran, and assumed office on 3 August 2021. The Supreme Leader of Iran is Ali Khamenei and First Vice President is Eshaq Jahangiri.

19. Six party talk was to find a peaceful solution to the security concerns against:
    A. North Korean military
    B. Chinese Nuclear Weapons
    C. **North Korean Nuclear Weapons**
    D. Japanese trade

**Subject:** General Knowledge
**Topic:** International Affairs

**Concept Note:** The six-party talks were a series of multilateral negotiations held intermittently since 2003 and attended by China, Japan, North Korea, Russia, South Korea, and the United States for the purpose of dismantling North Korea's nuclear program. The talks were hosted in Beijing and chaired by China. North Korea decided to no longer participate in the six-party process in 2009. These talks were a result of North Korea withdrawing from the Nuclear Non-Proliferation Treaty (NPT) in 2003.

20. US withdrew from Iran nuclear deal on:
    A. 8 March 2018
    B. 8 April 2018
    C. **8 May 2018**
    D. 8 June 2018

**Subject:** Current Affairs
**Topic:** International Affairs

**Concept Note:** Unofficially known as the "Iran Deal" or the "Iran Nuclear Deal", the Joint Comprehensive Plan of Action is an agreement on Iran's nuclear program reached in July 2015 by Iran, the P5+1 (the five

permanent members of the United Nations Security Council—China, France, Russia, United Kingdom, United States—plus Germany)and the European Union. On May 8, 2018, the United States announced its withdrawal from the JCPOA.

21. The 11th International Defence Exhibition and Seminar (IDEAS) was held between:
A. 27 to 30 August 2018
B. 25 to 28 September 2018
C. 28 to 31 October 2018
D. **15 to 18 November 2021**

**Subject:** Current Affairs
**Topic:** Events
**Concept Note:** The International Defence Exhibition and Seminar, more commonly referred to as IDEAS, is a defence sector event, held biannually, in Pakistan. It was initiated by President Pervez Musharraf in 2000.

22. Which country hosted SAFF (South Asian Football Federation) Championship in 2023?
**A. India**
B. China
C. Maldives
D. Pakistan

23. Russian President Vladimir Putin belongs to which party?
**A. All-Russian People's Front**
B. Communist party
C. A just Russia
D. Rodina

**Subject:** General Knowledge
**Topic:** Political Parties
**Concept Note:** The All-Russia People's Front, known by its Russian initialism ONF, is a political coalition in Russia started in 2011 by then-Prime Minister of Russia, Vladimir Putin, to provide United Russia with "new ideas, new suggestions and new faces".

24. Who is current Chinese Foreign Minister?
A. Taro Kono
B. Lei Ying
C. **Wang Yi**
D. Mei Kong

**Subject:** Current Affairs
**Topic:** Famous Personalities
**Concept Note:** He is the 11th Minister of Foreign Affairs, and assumed the position on 16 March 2018. He is also serving as the State Councilor of the People's Republic of China. Previously, he was the Director of the Taiwan Affairs Office.

25. Which Pakistani was named among the powerful people in the world by Forbes Magazine 2018?
A. Muhammad Ali
B. Imran Khan
C. **Qamar Javed Bajwa**
D. Raheel Sharif

**Subject:** Pakistan Affairs
**Topic:** Personalities
**Concept Note:** He belongs to the 16th Baloch Regiment. He is also the Chief of Army Staff (since November 2016). He has been awarded with Nishan-e-Imtiaz, Hilal-e-Imtiaz, Legion of Merit of Turkey, Order of the Military Merit (Jordan).

26. In June 2018, Pakistan alongside which country has shown interest in becoming members of the International Solar Alliance (ISA):
A. Iran
B. India
C. **China**
D. America

**Subject:** Current Affairs
**Topic:** International Affairs
**Concept Note:** The International Solar Alliance (ISA) is an alliance of more than 122 countries initiated by India. The primary objective of the alliance is to work for efficient exploitation of solar energy to reduce dependence on fossil fuels. The alliance is a treaty-based intergovernmental organization. After the United Nations, it is the largest grouping of states world-wide. Pakistan alongside China has shown interest in becoming members of the International Solar Alliance (ISA), which could potentially add weight to the first treaty-based international government organization based in India.

27. First nuclear power plant in Arab world, was inaugurated in_____:
A. Pakistan
B. Iran
C. **UAE**
D. Saudi Arabia

**Subject:** Current Affairs
**Topic:** Famous Events
**Concept Note:** The Barakah Nuclear Power Plant, in western Abu Dhabi, is a joint project between the UAE's Emirates Nuclear Energy Corporation (ENEC) and South Korea's Korea Electric Power Corporation (KEPCO)

28. UNHCR inked preliminary plan on Rohingya repatriation in April, 2018 with:
A. Pakistan
B. Iran
C. **Bangladesh**
D. Saudi Arabia

**Subject:** Current Affairs
**Topic:** Famous Treaties
**Concept Note:** 700,000 Rohingya Muslims have fled a military crackdown and crossed into Bangladesh from Myanmar's Rakhine state since August. The refugees are living in cramped camps at Cox's Bazar, and Bangladesh is keen to urge the refugees to return home. This memorandum of understanding (MoU) with Bangladesh will lay out a framework for the voluntary repatriation of Rohingya refugees to Myanmar.

29. International Anti-Corruption Day 2022 was observed:
**A. 9 December**
B. 9 March
C. 9 September
D. 9 October

**Subject:** General Knowledge
**Topic:** Famous Days
**Concept Note:** International Anti-Corruption Day has been observed annually, on 9 December, since the passage of the United Nations Convention Against Corruption on 31 October 2003 to raise public awareness for anti-corruption.

30. Which of the following is the first country to recognize "Orphanage trafficking" as form of modern slavery:
A. Austria
B. **Australia**
C. Russia
D. Canada

**Subject:** Current Affairs
**Topic:** Legislation

**Concept Note:** Orphanage trafficking is the active recruitment of children from vulnerable families into residential care institutions for the purpose of exploitation.

31. US, Mexico and _____ sign USMCA to Replace NAFTA:
A. Russia B. Australia
C. **Canada** D. Germany

**Subject:** Current Affairs
**Topic:** Treaties

**Concept Note:** The USMCA was signed by United States President Donald Trump, Mexican President Enrique Peña Nieto, and Canadian Prime Minister Justin Trudeau on November 30, 2018 as a side event of the 2018 G20 Summit in Buenos Aires.

32. The chief guest for IDEAS 2018 (International Defence Exhibition and Seminar) at Karachi Expo Center on 27th November 2018 was:
A. Prime minister of Pakistan, Shahbaz Sharif
B. **President of Pakistan, Dr. Arif Alvi**
C. Shah Mehmood Qureshi
D. Qamar Javed Bajwa

**Subject:** Current Affairs
**Topic:** Famous Events

**Concept Note:** Arif-ur-Rehman Alvi is the 13th and current President of Pakistan. He assumed office on 9 September 2018.

33. Recently Pakistan has been elected as a member of _____ for a four year term (2019-2022) :
A. Women's Right Council
B. Anti-Corruption Council
C. **International Telecommunication Union Council**
D. None

**Subject:** Current Affairs
**Topic:** Major Events

**Concept Note:** The International Telecommunication Union is a specialized agency of the United Nations that is responsible for issues that concern information and communication technologies. It is the oldest among all the 15 specialised agencies of the UN. Pakistan secured 155 out of a total of 177 votes at the ITU Plenipotentiary Conference 2018 held in Dubai to win a four-year term (2019-2022) at the Council

34. Who is the current Afghan Ambassador to Pakistan?
A. Mullah Bradar B. **Mohammad Shokaib**
C. Zalmay Khalilzad D. None of these

35. Kartarpur Border is located in which District of Punjab, Pakistan:
A. Lahore B. **Narowal**
C. Bhakkar D. Chakwal

**Subject:** Pakistan Geography
**Topic:** Borders

**Concept Note:** The Kartarpur Corridor is a proposed border corridor between India and Pakistan, connecting the Sikh shrines of Dera Baba Nanak Sahib (located in Punjab, India) and Gurdwara Darbar Sahib Kartarpur (in Punjab, Pakistan).

36. How many National and Provincial Constituencies by elections were held on 14th October 2018?
A. 10, 20 B. 12, 21
C. **11, 19** D. 10,27

**Subject:** Current Affairs
**Topic:** Elections

**Concept Note:** These elections were held on eleven constituencies for the National Assembly of Pakistan and nineteen constituencies belonging to four provincial assemblies of Pakistan.

37. The number of women candidates elected to the National Assembly through the direct General Elections of 2018 was?
A. 70 of 183 B. 83of 183
C. 88 of 183 D. **8 of 183**

**Subject:** Current Affairs
**Topic:** Elections

**Concept Note:** In 2018's election, eight women won on general contestable seats for the parliament, out of the 272 up for grabs. In 2013, nine women made it to the national assembly through direct election.

38. What was the voter turnout in General Elections 2018:
A. **53 million** B. 130 million
C. 113 billion D. 120 million

**Subject:** Current Affairs
**Topic:** Election

**Concept Note:** Registered voters were 105.96 million. The overall turnout was 51%.

39. What is the Range of Missile Hatf 7 ?
A. 700 miles B. 700 m
C. **700 km** D. none

**Subject:** General Knowledge
**Topic:** Pakistan Military

**Concept Note:** The Hatf 7 "Babur" is a short-range, turbojet-powered ground-launched cruise missile. Development of missile started in the 1990s as a response to the Indian cruise missile program.

40. Who is the current Prime Minister Pakistan?
A. Imran Khan
B. **Anwar ul Haq Kakar**
C. Mian Shahbaz Sharif D. Mohsin Naqvi

41. The total number of stages in the Holy Quran are:
A. 5 B. 6
C. **7** D. 8

42. There are _____ sources of Islamic Law:
A. 2 B. 3
C. **4** D. 5

**Subject:** Islam
**Topic:** Sharia Law
**Concept Note:** The four sources of Fiqh are:
a) Quran
b) Hadith
c) Ijma (Consensus)
d) Qiyas (Analogy)

# Solved Paper 03

1. How many Muslims participated in the Battle of Badr?
   A. 212 B. **313**
   C. 215 D. 317

**Subject:** Islam
**Topic:** Famous battles
**Concept Note:** The Battle of Badr was the first battle of Islam, fought in 2 AH. At the end of the battle, the 313 Muslims who participated were victorious against more than 1000 non-believers.

2. Which of the following women accepted Islam in the first place?
   A. Hazrat Ayesha R.A B. Hazrat Hajra R.A
   C. **Hazrat Khadija R.A** D. Hazrat Zainab R.A

**Subject:** Islam tudies
**Topic:** Famous Personalities
**Concept Note:** Hazrat Abu bakr (RA) was the first adult male to accept Islam, and Hazrat Ali (RA) was the first child who accepted Islam.

3. Where did the Prophet (PBUH) go on a business trip at the age of 25?
   **A. Syria** B. Makkah
   C. Madinah D. Yemen

**Subject:** Islamic Studies
**Topic:** Prophet (PBUH)

4. Hazrat Umar (RA) was born in:
   A. Madinah B. **Makkah**
   C. Syria D. Yemen

**Subject:** Islamic Studies
**Topic:** Famous Personalities
**Concept Note:** His personal name was 'Umar, Faruq was his title, and Ibn Al-Khattab, his family name. He was a renowned businessman.

5. The six authentic books of hadiths are called:
   A. Quran B. Kutub al-Muslim
   C. Sahih Bukhari D. **Kutub al-Sittah**

**Subject:** Islam
**Topic:** Hadith
**Concept Note:** These books are:
1. Sahih al-Bukhari.
2. Sahih Muslim.
3. Sunan Abu Dawud.
4. Sunan al-Tirmidhi.
5. Sunan al-Nasa'i.
6. Sunan Ibn Majah.

6. The approximation in which original length is very small as compared to final stretched length is:
   A. Flexibility B. Plasticity
   C. **Elasticity** D. Adaptability

**Subject:** General Science
**Topic:** Physics
**Concept Note:** Elasticity is the ability of a body to resist a distorting influence and to return to its original size and shape when that influence or force is removed. Solid objects will deform when adequate forces are applied to them. If the material is elastic, the object will return to its initial shape and size when these forces are removed.

7. What is the shortest wavelength for audible sound?
   A. **1.7 cm** B. 2.7 cm
   C. 3.7 cm D. 8.7 cm

**Subject:** General Science
**Topic:** Physics
**Concept Note:** Wavelength of audible sounds covers a very large range of scales. On the large end, you have low frequency waves with wavelengths of up to 17 meters (20 Hz), while the highest frequencies can be as small as 1.7 centimeters (20,000 Hz).

8. A wire has a resistance of 60 (Ohm). It is cut into two parts and both halves are connected in parallel. The new resistance is:
   **A. 15 ohm** B. 30 ohm
   C. 20 ohm D. 60 ohm

**Subject:** General Science
**Topic:** Physics
**Concept Note:** Let the starting resistance is R ,now cut it in half in two pieces. Now resistance is R/2 and R/2.
Now in parallel combination:
1/Req = 1/r1 +1/r2
Therefore 1/(r/2) +1/(r/2)
It will look like = 2/R+2/R = 4/R
Now R equivalent= R/4
So the new Resistance is 15 ohm

9. What is the synonym of "Mellow"?
   A. Harsh B. **Melodious**
   C. Rough D. Awful

**Subject:** English
**Topic:** Synonyms
**Concept Note:** Sentence: "She was hypnotized by the mellow tone of his voice"

10. The synonym of "Hang" is:
    A. Lower B. Disperse

C. **Dangle** D. None of the above

**Subject:** English
**Topic:** Synonyms
**Concept Note:** Sentence: "That's where people are supposed to hang their washing".

11. The synonym of "Expedient" is:
A. Transfer B. **Convenient**
C. Maleficent D. Tangible

**Subject:** English
**Topic:** Synonyms
**Concept Note:** Sentence: "Either side could break the agreement if it were expedient to do so"

12. The antonym of "Hallucination" is:
A. Illusion B. Fantasy
C. **Reality** D. Dream

**Subject:** English
**Topic:** Antonyms
**Concept Note:** Sentence: "He continued to suffer from horrific hallucinations"

13. The antonym of "Disgorge" is:
A. Discharge B. **Stay in place**
C. Eject D. Expel

**Subject:** English
**Topic:** Antonyms
**Concept Note:** Sentence: "The damaged ship disgorged thousands of gallons of oil into the bay"

14. The process by which both salt and water can be recovered from common salt solution is:
A. Crystallization **B. Distillation**
C. Sublimation D. Chromatography

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** Distillation is the process of separating the components or substances from a liquid mixture by using selective boiling and condensation. Distillation may result in essentially complete separation, or it may be a partial separation that increases the concentration of selected components in the mixture.

15. The drum of a Photostat machine is covered with:
A. Germanium B. **Selenium**
C. Silicon D. None of the above

**Subject:** General Science
**Topic:** Physics
**Concept Note:** The photoreceptor drum is the heart of the system. A drum is basically a metal roller covered by a layer of photoconductive material. This layer is made out of a semiconductor such as selenium. which can conduct electricity in some cases, but not in others. In the dark, the photoconductive layer on the drum acts as an insulator, resisting the flow of electrons from one atom to another. But when the layer is hit by light, the energy of the photons liberates electrons and allows current to pass through! These newly freed electrons are what neutralizes the positive charge coating the drum to form the latent image.

16. This is good _____:
A. A lot B. **Enough**
C. More D. Most

**Subject:** English
**Topic:** Sentence Completion

17. She ____ heartily:
A. Laugh B. **Laughs**
C. LaughingD. None of the above

**Subject:** English
**Topic:** Sentence Completion

18. I like the_____ book:
**A. New** B. Newer
C. Newest D. None of the above

**Subject:** English
**Topic:** Sentence Completion

19. The winner of PSL 8 (2023) is:
A. **Lahore Qalanders** B. Karachi Kings
C. Islamabad United D. Peshawar Zalmi

20. Who attended Pakistan Day's parade on 23rd March 2022?
A. Barham Salih, President of Iraq
**B. Faisal Bin Farhan-Al-Saud**
C. Abdul Hamid, President of Bangladesh
D. None

21. Who was the first Chairman of Senate of Pakistan?
A. Sadiq Sanjrani B. **Habibullah Marwat**
C. Qasim Suri D. none

**Subject:** Pakistan History
**Topic:** Famous Personalities
**Concept Note:** The 1st Chairman of the Senate was Habibullah Marwat while Wasim Sajjad remains the longest-serving chairman. Balochistan Senator Muhammad Sadiq Sanjrani elected to Senate as an independent in the March 3 election, is the current Chairman of the Senate, having assumed office on 12 March 2018.

22. The current US president (Joe Biden) assumed office on:
A. 20th January, 2016
**B. 20th January, 2021**
C. 20th January, 2018
D. 20th January, 2015

23. Who is the Present King of Saudi Arabia?
A. Ibn Saud B. Saud bin Abdulaziz
C. Faisal bin Abdulaziz **D. Salman bin Abdulaziz**

**Subject:** Current Affairs
**Topic:** Heads of States
**Concept Note:** Salman bin Abdulaziz has been King of Saudi Arabia, Prime Minister of Saudi Arabia, and Custodian of the Two Holy Mosques since 23 January 2015. He was the Governor of Riyadh for 48 years from 1963 to 2011. He was then appointed Minister of Defense. He was also named the Crown Prince in 2012

following the death of his brother Nayef bin Abdulaziz. Salman became the new King following the death of his half-brother, King Abdullah.

24. Who was the first lady representative of Pakistan in UN?
A. Hina Rabbani Khar B. **Maleeha Lodhi**
C. Shireen Rehman D. Maryam Nawaz

**Subject:** Current Affairs
**Topic:** Famous Personalities

**Concept Note:** Maleeha Lodhi was serving as Pakistan's Representative to the United Nations from 2015 to 2019, the first woman to hold the position. Previously, she served as Pakistan's envoy to the Court of St James's and twice as its ambassador to the United States.

25. Since 2018 President of People 's Republic of China is now elected for
A. Two times B. Three times
C. Four times D. **Indefinite times**

**Subject:** Current Affairs
**Topic:** Heads of States

**Concept Note:** China had imposed a two-term limit on its president since the 1990s, but a constitutional amendment in 2018 lifted the presidential term limits, allowing the President to stay in office indefinitely.

26. Who is the Prime Minister of Britain?
A. Boris Johnson **B.** Rishi Sonak
C. Dmitry Medvedev D. None

**Subject:** Current Affairs
**Topic:** Heads of States
**Concept Note:**
Rishi Sonak Assumed office on 25-Oct-2022

27. WTO stands for:
**A. World Trade Organisation**
B. World Tower Organisation
C. World Trade Organisers
D. None

**Subject:** General Knowledge
**Topic:** Abbreviations

**Concept Note:** The World Trade Organization (WTO) is an intergovernmental organization that is concerned with the regulation of international trade between nations. The WTO officially commenced on 1 January 1995 under the Marrakesh Agreement, signed by 123 nations on 15 April 1994, replacing the General Agreement on Tariffs and Trade (GATT), which commenced in 1948. It is the largest international economic organization in the world.

28. One day International Series Played between Pakistan and Australia in 2022 in Pakistan. ____won series by____
A. Pakistan by 2-0 B. Australia by 2-1
**C. Pakistan by 2-1** D. Australia by 3-0

**Subject:** Current Affairs
**Topic:** Sports

**Concept Note:** Australian Cricket team visited Pakistan from 4 March -2022 to 5 April 2022 and played 3 Test Matches, 3 ODIs and 1T20 Match- Australian won Test series by 1-0 and also won T20 by 1-0.

29. Total membership of US senate is:
A. 50 B. 150
C. **100** D. 250

**Subject:** General Knowledge
**Topic:** USA

**Concept Note:** The Constitution of USA prescribes that the Senate be composed of two senators from each State (therefore, the Senate currently has 100 Members) and that a senator must be at least thirty years of age, have been a citizen of the United States for nine years, and, when elected, be a resident of the State from which he or she is elected.

30. ICC Champions Trophy 2017 was held in:
A. Sri Lanka B. Russia
C. Canada **D. England and Wales**

**Subject:** Sports
**Topic:** Cricket

**Concept Note:** The 2017 ICC Champions Trophy was the eighth ICC Champions Trophy, a cricket tournament for the eight top-ranked One Day International (ODI) teams in the world. It was held in England and Wales from 1 to 18 June 2017. Pakistan won the competition for the first time with a 180-run victory over India in the final at The Oval. The margin of victory was the largest by any team in the final of an ICC ODI tournament in terms of runs.

31. Manchar Lake is located near:
A. Kaghan Valley **B. Sehwan Sharif**
C. Gilgit D. Hunza Valley

**Subject:** Pakistan Geography
**Topic:** Lakes

**Concept Note:** Lake Manchar is the largest freshwater lake in Pakistan and one of Asia's largest. It is located west of the Indus River, in Jamshoro District and Dadu District, Sindh. It is located at a distance of 18 km from Sehwan Sharif on the west side of the River Indus, in district Jamshoro.

32. The tenure of the Senator in Pakistan is:
A. 5 years B. 10 years
C. **6 years** D. 2 years

**Subject:** General Knowledge
**Topic:** Pakistan Senate

**Concept Note:** In Pakistan, elections for Senate are held every three years for one half of the Senate and each Senator has a term of six years.

33. 18th Amendment in the Constitution of Pakistan was passed on:
A. 8th April, 2015 B. 8th April, 2011
C. 8th April, 2009 **D. 8th April, 2010**

**Subject:** Pakistan History
**Topic:** Constitutional development

**Concept Note:** The amendment removed the power of the President of Pakistan to dissolve the Parliament unilaterally, turning Pakistan from a semi-presidential to a parliamentary republic, and renaming the North-West Frontier Province to Khyber Pakhtunkhwa. It also abolished the concurrent list, transferring powers to Provinces from the Federal government.

34. Mujahid Anwar got Legion Award from which country:
A. America B. **Turkey**
C. Brazil D. China

**Subject:** Current Affairs
**Topic:** Military
**Concept Note:** Air Chief Marshal Mujahid Anwar Khan, Chief of the Air Staff, Pakistan Air Force (PAF) was awarded the Turkish Legion of Merit in 2018 in recognition of his services for promoting defence ties between Pakistan and Turkey.

35. When did the Holy Prophet did Hijrah?
A. 621 A. D B. 623 A. D
C. **622 A. D** D. 620 A. D

**Subject:** Islamic Studies
**Topic:** Prophet (PBUH)

36. Nitrous Oxide is a combination of which two gases:
A. Nitrogen, Oxide B. **Nitrogen, Oxygen**
C. Nitrus, Oxygen D. None

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** Nitrous Oxide is also called the Laughing gas.

37. Which of the following is the governor of the State Bank of Pakistan?
A. Murtaza Syed B. Reza Beqir
C. **Jameel Ahmed** D. Tariq Bajwa

38. When did President Arif Alvi took oath?
A. **9 September 2018** B. 9 August 2018
C. 9 November 2018 D. 9 July 2018

**Subject:** Current Affairs
**Topic:** Heads of State
**Concept Note:** Arif-ur-Rehman Alvi is the 13th and current President of Pakistan. He assumed office on 9 September 2018.

39. "To cut corners" means:
A. Do something in the hardest way
B. Do something at last
C. **Do something in the easiest way**
D. Do something with credibility

**Subject:** English
**Topic:** Idioms
**Concept Note:** Sentence: "There is always a temptation to cut corners when time is short"

40. Pakistan Purchased Gwadar from Oman. Gwadar became part of Pakistan on:
A. 8th September 1978 B. 8th September 1965
C. 8th September 1950 D. **8th September 1958**

**Subject:** Pakistan History
**Topic:** Treaties
**Concept Note:** Pakistan purchased Gwadar from Oman for 3 million dollars and Gwadar officially become part of Pakistan. At that time, Gwadar was a small and under developing village with a population of a few thousand. In July 1977, Pakistani government integrated Gwadar in Balochistan as District headquarters of the newly formed Gwadar District.

41. Balochistan's newly emerged political party is:
A. Balochistan Awami Tehreek
B. Balochistan Awami League
C. **Balochistan Awami Party**
D. None

**Subject:** Current Affairs
**Topic:** Elections

# Solved Paper 04

1. "To be a hot potato" means:
A. controversial issue that is easy to handle
B. controversial issue that is impossible to handle
C. **controversial issue that is difficult to handle**
D. serious issue that is difficult to handle

**Subject:** English
**Topic:** Idioms
**Concept Note:** Sentence: Gun control is a political hot potato

2. Empirical Formula of Benzene is:
A. $C_3H_6$ B. $C_6H_3$
C. $C_7H_7$ D. **$C_6H_6$**

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** Benzene is an organic chemical compound with the chemical formula $C_6H_6$. The benzene molecule is composed of six carbon atoms joined in a ring with one hydrogen atom attached to each. As it contains only carbon and hydrogen atoms, benzene is classified as a hydrocarbon.

3. Which of the following is a good conductor of electricity
A. Air B. **Water**
C. Gas D. None

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** Water is a great ionic solvent: a liquid in which ionic compounds can dissolve easily. It's those dissolved ions that can conduct well - and when water

contains many dissolved ions, those ions make a good conductor

4. Function of heat engine is:
   A. Converts chemical energy to mechanical energy
   B. Converts thermal energy to mechanical energy
   C. **Converts thermal energy and chemical energy to mechanical energy**
   D. Converts mechanical energy to thermal energy

**Subject:** General Science
**Topic:** Chemistry

**Concept Note:** A heat engine is a system that converts heat or thermal energy—and chemical energy—to mechanical energy, which can then be used to do mechanical work. It does this by bringing a working substance from a higher state temperature to a lower state temperature

5. When did Pakistan became a permanent member of the Shanghai Cooperation Organization?
   **A. 9 June 2017** B. 9 July 2018
   C. 9 June 2019 D. 9 June 2018

**Subject:** World Organizations
**Topic:** SCO

**Concept Note:** The Shanghai Cooperation Organisation (SCO), or Shanghai Pact, is a Eurasian political, economic, and security alliance, the creation of which was announced on 15 June 2001 in Shanghai, China by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan. India and Pakistan signed the memorandum of obligations in June 2016 in Tashkent, Uzbekistan, thereby starting the formal process of joining the SCO as full members. On 9 June 2017, at the historic summit in Astana, India and Pakistan officially joined SCO as full-fledged members.

6. Where was the third session of WHO held?
   A. Tokyo, Japan
   B. Geneva, Switzerland
   C. **Durban, South Africa**
   D. London, England

**Subject:** World Organizations
**Topic:** WHO

**Concept Note:** The third session of the Conference of the Parties (COP3) to the WHO Framework Convention on Tobacco Control was held from 17 to 22 November 2008 in Durban, South Africa. Delegates from 130 Parties, and observers including seven States non-Party, three international intergovernmental organizations and 12 nongovernmental organizations participated.

7. In worships, which of the following is the most fundamental pillar of Islam?
   **A. Namaz** B. Roza
   C. Zakat D. Hajj

**Subject:** Islamic Studies
**Topic:** Prayers

8. Who accompanied Holy Prophet during the early preaching of Islam?
   A. Hazrat Umer R.A
   B. Hazrat Usman R.A
   C. Hazrat Ali R.A
   D. **Hazrat Abu Bakar R.A**

**Subject:** Islam
**Topic:** Famous Personalities

9. The currency of Vietnam is
   **A. Dong** B. Lira
   C. Euro D. Dollar

**Subject:** General Knowledge
**Topic:** Currencies

**Concept Note:** The dong (code: VND) has been the currency of Vietnam since May 3, 1978. It is represented by the symbol "₫".
Lira is the Currency of Turkey.
Dollar is used as a currency by the US, Australia, Canada and other South American countries.
Euro is the chief currency in Europe.

10. Where is the headquarters of NATO located?
    A. Paris, France B. Geneva, Switzerland
    **C. Brussels, Belgium** D. Washington, US

**Subject:** World Organizations
**Topic:** NATO

**Concept Note:** The North Atlantic Treaty Organization, also called the North Atlantic Alliance, is an intergovernmental military alliance between 29 North American and European countries. The organization implements the North Atlantic Treaty that was signed on 4 April 1949.

11. Who took over PIA as the President and CEO?
    A. Air Marshal Zaheer Ahmad Babar
    **B. Air Marshal Arshad Malik**
    C. Air Marshal Ahmar Shehzad
    D. None

**Subject:** Current Affairs
**Topic:** Famous Personalities

**Concept Note:** He took the charge in October, 2018. Prior to joining PIA, he was serving as the vice chief of air staff. He is a recipient of the Hilal-e-Imtiaz (M), Sitara-e-Imtiaz (M) and Tamgha-e-Imtiaz (M).

12. TAPI stands for:
    A. Turkmenistan, Argentina, Paraguay, India pipeline
    B. Tajikistan, Afghanistan, Poland, Iran pipeline
    C. Thailand, America, Pakistan, Iraq pipeline
    D. **Turkmenistan, Afghanistan, Pakistan, India pipeline**

**Subject:** General Knowledge
**Topic:** Treaties

**Concept Note:** The Turkmenistan–Afghanistan–Pakistan–India Pipeline (TAPI), also known as Trans-Afghanistan Pipeline, is a natural gas pipeline being developed by the Galkynysh – TAPI Pipeline Company Limited with participation of the Asian Development Bank.

13. Trees take $CO_2$ and release $O_2$ in the presence of:
    A. Water **B. Sunlight**

C. Air D. None of these

**Subject:** General Science
**Topic:** Biology

14. Who is the President of Georgia?
A. Xi Jinping B. Frank-Walter Steinmeier
C. Charles Michel D. **Salome Zourabichvili**

**Subject:** Current Affairs
**Topic:** Heads of State

**Concept Note:** Salome Zourabichvili is a Georgian politician and former French diplomat who currently serves as the 5th President of Georgia, in office since December 2018. She is the first woman to be elected as Georgia's president, a position she will occupy for a term of six years.

15. Blood formation in the body is done by:
A. Heart B. Brain
C. Lungs D. **None**

**Subject:** General Science
**Topic:** Biology

**Concept Note:** Hematopoiesis is the process that produces blood. Hematopoiesis takes place in the Bone Marrow

16. Surah "Dukhan" means:
A. Honey bee B. **Smoke**
C. Ant D. Cow

**Subject:** Islam
**Topic:** Quranic Surahs

**Concept Note:** Surah Dukhan is the 44th chapter of the Quran with 59 verses.

17. The word opposite in meaning to "Astute" is:
A. Sharp B. Acute
C. **Stupid** D. Clever

**Subject:** English
**Topic:** Antonyms

**Concept Note:** Sentence: It is gratifying my dear, that you are sufficiently astute to recognize my skill and superiority

18. Who is the Governor of Sindh?
A. **Nasreen Jalil** B. Aman Ullah Yasinzai
C. Shah FarmanD. Mohammad Sarwar

Subject: Current Affairs
Topic: Government officials
Concept Note: Nasreen Jaleel is the 2nd female Governor of Sindh after Begum Rana Liaqat Ali khan. She belongs to Political Party MQM.

19. The first ever female Chief Justice Tahira Safdar is Chief Justice of which high court:
A. Punjab B. Sindh
C. **Balochistan** D. KPK

**Subject:** Current Affairs
**Topic:** Famous Personalities

**Concept Note:** Syeda Tahira Safdar is a Pakistani jurist who is currently serving as the Chief Justice of Balochistan High Court. She will remain in this post until 4 October 2019. She is the first female chief justice of any court in the history of Pakistan.

20. World water day is celebrated on:
A. **22 March** B. 8 March
C. 9 March D. 15 March

**Subject:** General Knowledge
**Topic:** Famous Days

**Concept Note:** World Water Day is an annual UN observance day that highlights the importance of freshwater. The day is used to advocate for the sustainable management of freshwater resources.

21. Antonym of "Cognizance" is
A. Awareness B. Consciousness
C. **Ignorance** D. Knowledge

**Subject:** English
**Topic:** Antonyms

**Concept Note:** Sentence: Under his cognizance come questions of public order, health and elections to parliament.

22. Synonym of "Amalgamation" is:
A. Separate B. **Merger**
C. Unconnected D. Different

**Subject:** English
**Topic:** Synonyms

**Concept Note:** Sentence: It has also been shown that gold volatilized when a gold-amalgam is distilled.

23. Synonym of "Bane" is:
A. **Nuisance** B. Peaceful
C. Pleasure D. Comfortable

**Subject:** English
**Topic:** Synonyms

**Concept Note:** Sentence: My cruel teacher was the bane of my existence.

24. Antonym of "Astute" is:
A. Insightful B. Wise
C. **Naïve** D. Clever

**Subject:** English
**Topic:** Antonyms
**Concept Note:** Sentence: It is gratifying my dear, that you are sufficiently astute to recognize my skill and superiority.

25. Synonym for "Cynical" is:
A. **Sardonic** B. Pleasing
C. Comforting D. None of the above

**Subject:** English
**Topic:** Synonyms

**Concept Note:** Sentence: Some people regard the governor's visit to the hospital as a cynical attempt to win votes.

26. Due to the killing of a spy, 43 Russian diplomats were expelled by:
A. Canadian Union B. Russian Union
C. **European Union** D. American Union

**Subject:** Current Affairs
**Topic:** Famous Events
**Concept Note:** Russian diplomats were expelled in response to a nerve agent attack in the UK. Russian ex-spy Sergei Skripal and his daughter, Yulia, were poisoned on 4 March, 2018 in the southern English city.

27. No Eye color pigments are made in:
A. Green eyes B. **Blue eyes**
C. Brown eyes D. Black eyes

**Subject:** General Science
**Topic:** Physics
**Concept Note:** People with blue eyes have a completely colourless stroma with no pigment at all, and it also contains no excess collagen deposits. This means that all the light that enters it is scattered back into the atmosphere and as a result of the Tyndall effect, creates a blue hue.

28. When forests are burned, which gases are expelled as a result?
**A. More carbon dioxide, less oxygen**
B. Less carbon dioxide, more oxygen
C. Both A, B
D. None

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** When burned, trees generate more $CO^2$ emissions per unit of energy generated than fossil fuels. An oft overlooked fact is that burning wood emits more $CO^2$ than fossil fuels per megawatt-hour (MWh) of electricity generated or per unit of heat generated

29. Religion of Hazrat Adam is:
A. Christianity B. Judaism
C. **Islam** D. Hinduism

**Subject:** Islam
**Topic:** Prophets
**Concept Note:** Being the first human, he worshipped the One God, which is the same in Islam.

30. The US President has a tenure of:
A. 3 years **B. 4 years**
C. 5 years D. 6 years

**Subject:** General Knowledge
**Topic:** USA
**Concept Note:** In the United States, the president of the United States is elected indirectly through the United States Electoral College to a four-year term, with a term limit of two terms (totaling eight years)

31. Strongest political party in the UK is:
A. Communist Party B. Conservative Party
C. Labour Party D. **both B and C**

**Subject:** General Knowledge
**Topic:** Politics

32. When did George H. W. Bush die?
**A. November 30, 2018** B. January 20, 1993
C. November 20, 2001 D. March 20, 2017

**Subject:** Current Affairs
**Topic:** Heads of States
**Concept Note:** George Herbert Walker Bush was an American politician and businessman who served as the 41st president of the United States from 1989 to 1993 and the 43rd vice president from 1981 to 1989.

33. When was the Bogra formula presented?
A. 9 March 1956 **B. 7 October 1953**
C. 24 November 1953 D. 8 October 1961

**Subject:** Pakistan History
**Topic:** Constitutional Development
**Concept Note:** The Bogra Formula was a political compromise presented and proposed by Prime Minister Bogra on 7 October 1953 before the Constituent Assembly.

34. Najebullah is the title given to which prophet:
A. Hazrat Yaqoob A. S
B. Hazrat Musa A. S
C. Hazrat Ibrahim A. S
D. **Hazrat Dawood A. S**

**Subject:** Islam
**Topic:** Prophets
**Concept Note:** Title of Hazrat Musa (AS): Kaleem Ullah
Title of Hazrat Yaqoob (AS): Israel
Title of Hazrat Ibrahim (AS): Khaleelullah

35. 5th Kalima is:
A. Touheed **B. Astaghfar**
C. Shahadat D. Tayab

**Subject:** Islam
**Topic:** Beliefs
**Concept Note:** First Kalima known as the "kalimah tayyibah", the second is called the shahada, third "tamjeed `` fourth tawheed"fifth "Istighfar" and sixth is called "radde kufr"

36. The favourite religion of Allah is:
A. Christianity **B. Islam**
C. Judaism D. Hinduism

**Subject:** Islamic Studies
**Topic: Religions**

37. Current crown prince of Saudi Arabia is:
A. Nayef bin Abdulaziz **B. Mohammad bin Salman**
C. Sultan bin Salman D. Abdullah

**Subject:** Current Affairs
**Topic:** Head of States
**Concept Note:** Mohammad bin Salman, known as MBS, is the Crown Prince of Saudi Arabia. He is currently serving as the country's deputy prime minister (the title

of prime minister being held by the king) and is also chairman of the Council for Economic and Development Affairs

38. Former President of USA Donald Trump belongs to which party:
A. Conservative Party B. Unionist Party
C. Communist party D. **Republican Party**

**Subject:** Current Affairs
**Topic:** Heads of States

# Solved Paper 05

1. Antonym of "Sabotage" is:
A. Wreck B. Destroy
C. **Devotion** D. Obstruct

**Subject:** English
**Topic:** Antonym
**Concept Note:** Sentence: "Power lines from South Africa were sabotaged by rebel forces".

2. Deficiency of Vitamin C can cause:
A. Rickets B. Anemia
C. Night blindness D. **Scurvy**

**Subject:** General Science
**Topic:** Diseases
**Concept Note:** Scurvy is a disease resulting from a lack of vitamin C (ascorbic acid). Early symptoms of deficiency include weakness, feeling tired, and sore arms and legs. Without treatment, decreased red blood cells, gum disease, changes to hair, and bleeding from the skin may occur.

3. Square root of "x" will be equal to 64:
A. **8** B. 7
C. 6 D. 5

**Subject:** General Ability
**Topic:** Square Roots
**Concept Note:** 8*8=8^2=64

4. The old name of ECO was:
A. RCO B. OEC
C. **RCD** D. None

**Subject:** World Organizations
**Topic:** ECO

5. G20 summit, 2023 was held in:
A. Tokyo, Japan B. **New York, America**
C. Paris, France D. **New Dehli, India**

**Subject:** Current Affairs
**Topic:** Summits
**Concept Note:** The 2023 G20 summit was the 18th meeting of Group of Twenty (G20), which was held on 09, 10 September 2023 in the city of New Dehli, India. It was the first G20 summit to be hosted in India

6. When will Britain separate from EU?
A. **2019** B. 2018
C. 2017 D. 2021

**Subject:** Current Affairs
**Topic:** Brexit
**Concept Note:** Following a referendum held on 23 June 2016 in which 51.9 percent of those voting supported leaving the EU, the Government invoked Article 50 of the Treaty on European Union, starting a two-year process which was due to conclude with the UK's exit on 29 March 2019. That deadline has since been extended to 31 October 2019.

7. Who is current interior minister of Pakistan?
A. Rana Sanaullah B. Zubaida Jalal Khan
C. **Sarfraz Bugti** D. Umer Ayub Khan

8. Who is the Chief Minister of Balochistan?
A. Mir Abdul Quddus Bizenjo
B. Ali Mardan Khan Dhomki
C. Murad Ali Shah
D. Abdul Quddos Bazinjo

9. If average age of 3 persons is 23, we add a fourth person, what would be his age to keep the same average:
A. 22 B. **23**
C. 24 D. 25

10. When first Constituent Assembly was dismissed?
A. October 24, 1971 B. October 24, 1964
C. October 24, 1952 D. **October 24, 1954**

**Subject:** Pakistan History
**Topic:** Constitutional Development

11. The production of seedless fruits is called?
A. **Parthenocarpy** B. Botany
C. Pollination D. Production

**Subject:** General Science
**Topic:** Biology
**Concept Note:** Parthenocarpy is the natural or artificially induced production of fruit without fertilization of ovules, which makes the fruit seedless.

12. Study of sound is called:
A. Optics B. Ornithology
C. **Acoustics** D. Geology

**Subject:** General Science
**Topic:** Physics
**Concept Note:** Acoustics is the branch of physics that deals with the study of all mechanical waves in gases, liquids, and solids including topics such as vibration, sound, ultrasound and infrasound

13. Law of thermodynamics states as:
A. **Energy can neither be created nor destroyed in an isolated system**

B. Energy cannot be created in an isolated system
C. Energy can be created in an isolated system
D. Energy cannot be created or destroyed

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** There are three laws of thermodynamics:
- The first law, also known as Law of Conservation of Energy, states that energy cannot be created or destroyed in an isolated system.
- The second law of thermodynamics states that the entropy of any isolated system always increases.
- The third law of thermodynamics states that the entropy of a system approaches a constant value as the temperature approaches absolute zero.

14. How many electrons are present in 3rd orbit?
A. 2 B. 6
C. 12 D. **18**

**Subject:** General Science
**Topic:** Chemistry

15. Gomal Zam dam is located in:
**A. KPK** B. Punjab
C. Balochistan D. Sindh

**Subject:** Pakistan Affairs
Topic: Infrastructure
**Concept Note:** Gomal Zam Dam is a multi-purpose gravity dam in South Waziristan Agency of Federally Administered Tribal Areas, Pakistan. The dam impounds the Gomal River, a tributary of the Indus River, at Khajuri Kach, where the Gomal River passes through a narrow ravine. It opened for operation in April, 2011.

16. 1962 constitution came into effect on:
A. March 1962 B. April 1962
C. May 1962 D. **June 1962**

**Subject:** Pakistan History
**Topic:** Constitutional Development
**Concept Note:** The Constitution of 1962 consisted of 250 Articles, which were divided into 12 Parts and three Schedules. It advocated presidential form of government with absolute powers vested in the President. The President was to be a Muslim not less than 35 years of age.

17. Who was Najeeb Ullah?
A. President of Bangladesh
B. **President of Afghanistan**
C. President of Yemen
D. Prime Minister of Afghanistan

**Subject:** General Knowledge
**Topic:** Heads of States
**Concept Note:** Najibullah Ahmadzai was the President of Afghanistan from 1987 until 1992, when the mujahideen took over Kabul. He was Assassinated in Kabul in 1996.

18. To which party UK's former Prime Minister, Theresa May belongs?
**A. Conservative Party** B. Labour Party
C. Brexit party D. Liberal Party

**Subject:** General Knowledge
**Topic:** Heads of States

19. Ozone is a:
A. Element **B. Gas**
C. Solid D. None of the above

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** Ozone is a gas made up of three oxygen atoms ($O_3$). It occurs naturally in small (trace) amounts in the upper atmosphere (the stratosphere). Ozone protects life on Earth from the Sun's ultraviolet (UV) radiation.

20. According to Galileo's gravity theory, the_____ of falling objects remains the same:
A. Speed B. Velocity
**C. Acceleration** D. Mass

**Subject:** General Science and Ability
Topic: Scientific Theory
**Concept Note:** In the 16th century, the Italian scientist, Galileo Galilei, dropped two spheres of different masses from the Leaning Tower of Pisa to demonstrate that their acceleration remains the same.

21. The maximum tenure of the US President is:
**A. 8 years** B. 9 years
C. 5 years D. 6 years

**Subject:** General Knowledge
**Topic:** Heads of States
**Concept Note:** In the United States, the president of the United States is elected indirectly through the United States Electoral College to a four-year term, with a term limit of two terms (totaling eight years).

22. CPEC is a part of:
**A. One belt, one road project**
B. Beijing subway system
C. High Speed railway system
D. None

**Subject:** Current Affairs
**Topic:** BRI
**Concept Note:** The One Belt One Road (OBOR), the brainchild of Chinese President Xi Jinping, is an ambitious project that focuses on improving connectivity and cooperation among multiple countries spread across the continents of Asia, Africa, and Europe. This venture has two major components: one, overland known as the Silk Road Economic Belt, while the other, the maritime component, is termed as the Maritime Silk Road.

23. When did the Governor General Ghulam Muhammad abolished constituent assembly?
A. 1952 B. 1971
**C. 1954** D. 1962

**Subject:** Pakistan History
**Topic:** Famous Personalities
**Concept Note:** In October 1954, Constituent Assembly of Pakistan amended the Constitution, denuding the Governor General from his discretionary powers under which he dismissed Khawaja Nazimuddin's Government. Ghulam Muhammad acted immediately and dissolved the Constituent Assembly.

24. National bird of Pakistan is:
A. Parrot B. Sparrow
C. Grouse D. **Chukor**

**Subject:** General Knowledge
**Topic:** Pakistan
**Concept Note:** The Chukor is a 34-38 cm round shape long bird. It has light brown back and gray breast and buff belly. Its face is white with a black gorget. It has rufous-streaked flanks and red legs. If it faces any threat, it prefers to run rather than fly, but if necessary it flies a short distance on rounded wings. For hunters, Chakor is a very challenging bird because of its surgical upward flights and sudden disappearances in the bushes.

25. Which law states as, Current in a conductor is directly proportional to voltage across the conductor:
**A. Ohm's law** B. Newton's law
C. Kirchhoff's law D. Joule's law

**Subject:** General Science
**Topic:** Physics
**Concept Note:** Ohm's law states that the current through a conductor between two points is directly proportional to the voltage across the two points. Introducing the constant of proportionality, the resistance, one arrives at the usual mathematical equation that describes this relationship:
$I = V/R$
where I is the current through the conductor in units of amperes, V is the voltage measured across the conductor in units of volts, and R is the resistance of the conductor in units of ohms.

26. Which law states that if two thermodynamic systems are each in thermal equilibrium with a third one, then they are in thermal equilibrium with each other?
A. 1st law of thermodynamics
B. 2nd law of thermodynamics
C. **Zeroth law of thermodynamics**
D. Law of conservation of energy

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** The Zeroth Law of Thermodynamics states that if two systems are in thermodynamic equilibrium with a third system, the two original systems are in thermal equilibrium with each other. Basically, if system A is in thermal equilibrium with system C and system B is also in thermal equilibrium with system C, system A and system B are in thermal equilibrium with each other.

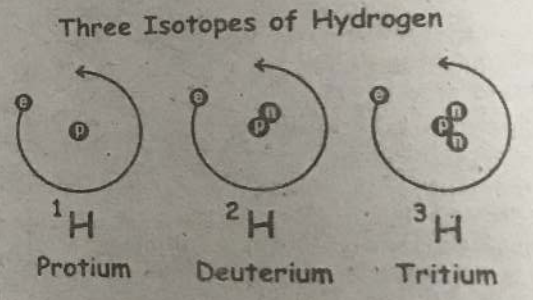


27. What is the study of cells called?
A. Biology
B. **Cytology**
C. Dermatology
D. Morphology

**Subject:** General Science
**Topic:** Biology
**Concept Note:** Cytology is the branch of biology and medicine concerned with the structure and function of plant and animal cells.

28. The third isotope of hydrogen is:
A. Deuterium B. Protium
C. **Tritium** D. Neutrino

**Subject:** General Science and Ability
**Topic:** Chemistry
**Concept Note:**




29. The function of Ozone layer is:
**A. absorb ultraviolet radiations from the Sun**
B. kill germs in the air
C. increase bacteria present in the air
D. create radiations

**Subject:** General Science
**Topic:** Chemistry
**Concept Note:** Ozone is a gas made up of three oxygen atoms ($O_3$). It occurs naturally in small (trace) amounts in the upper atmosphere (the stratosphere). Ozone protects life on Earth from the Sun's ultraviolet (UV) radiation.

# GENERAL KNOWLEDGE NOTES

# WORLD GEOGRAPHY

## Some Facts About The Earth

**Size of the Earth**
Diameter: 12742 km
Radius: 6371 km
Surface Area: 510.1 million km²
Land Area: 148.9 million km²
**Distance from Sun:** 149.59 million km (source: NASA)
**Distance from Moon:** 384400 km

**Some Basic Geographical Terms**
**Longitudes** → imaginary lines running from North to South of the globe, they specify the position of a point as per East and West.
***Latitudes*** → imaginary lines running from East to West which specify location of a point with respect to the North or South and with respect to the distance of it from the Equator.
***Equator*** → the earth is divided into the Northern and Southern Hemisphere by the latitudinal lines, the imaginary line running through the centre of the earth is the equator and it's at 0 degree latitude.
***Prime Meridian*** → the point where the longitude equals to 0 degree and it is used in coordination and finding locations of points on Earth. This line divides Earth into Easterna and Western Hemispheres.
***International Date Line (IDL)*** → it is an imaginary line running from North to South and the day and date change as you cross this line; going westward would increase the day and date by one and vice versa for going eastward.
***Greenwich Mean Time (GMT)*** → The time calculated by the Royal Observatory in Greenwich, London; GMT is also used synonymously with UTC which is Coordinated Universal Time.

## Facts related to continents (largest, smallest, continent with no desert, nicknames of continents, etc.)

- There are seven continents in the world, which are; Africa, Antarctica, North America, South America, Asia, Europe, Australia/Oceania.
- Asia is the largest continent by size and population.
- Australia is the smallest continent by size and population.
- Asia has the second most countries, i.e. 49.
- Antarctica has no country.
- Europe has the largest number of landlocked countries while Kazakhstan is the largest landlocked country in the world.
- Europe has the lowest birth rate.
- Africa is the world's most multilingual continent.
- Antarctica has the greatest concentration of volcanoes
- Australia is the continent without a glacier
- Antarctica is also known as the White Continent.
- Antarctica is also known as The Forgotten Continent.
- Antarctica is also known as The Continent of Science
- Africa is also known as the Dark Continent.
- Africa is also known as the Cradle of Mankind
- Australia is also known as the Island Continent
- South America is also known as the Bird Continent.
- Asia is also known as the Home of Man.
- Asia is also known as the Cradle of Human Civilization.
- Antarctica is the continent with no time zone.
- South America has the world's longest mountain ranges (Andes).
- Asia has the highest point on Earth (Mount Everest).
- Gibson Desert is located in Australia.

## Independent States in the Continents of the World

| Continent | Number of Independent States |
|---|---|
| Africa | 54 |
| Asia | 49 |
| Europe | 44 |
| North America | 23 |
| Antarctica | No countries, but 7 nations claim different parts of it (New Zealand, Australia, France, Norway, UK, Chile and Argentina) |
| South America | 16 |
| Oceania | 14 |

## Quick Facts about Seas and Oceans

- The Pacific Ocean is the deepest ocean in the world.
- Mariana Trench is the deepest trench on Earth located in the Pacific Ocean.
- The Mid-Atlantic Ridge is the longest mountain range located in the Atlantic Ocean.
- Ring of Fire is situated in the Pacific Ocean region, it is a ring of volcanoes.
- The North Pacific Ocean is considered to be the world's most polluted Ocean.
- The Red Sea is known as the Red Sea because a type of algae called Trichodesmium erythraeum, is found in the sea.

- The Dead Sea is called dead because of its high salinity content which makes it impossible for macroscopic aquatic life to survive. It is also the saltiest sea in the world.
- Black Sea is known as Black because it was deemed to be inhospitable before Greek colonization as it was subject to severe storms which made it difficult to navigate it as well as the storms make it look black.
- The Indian Ocean and the Atlantic Ocean meet at the Cape of Good Hope, which is in South Africa.
- The Pacific Ocean and the Atlantic Ocean meet at Cape Horn.
- The Indian Ocean and the Pacific Ocean meet at the Gulf of Alaska.
- The Indian Ocean and the Southern Ocean meet at Cape Leeuwin.
- Oceans cover 70% of the world's surface. *

## World Oceans

### Surface Area, Volume, and Average depth of Oceans

| *For this calculation, the Southern Ocean includes all marine waters south of 60° S. | | | | |
|---|---|---|---|---|
| Data Source: Eakins, B.W. and G.F. Sharman, Volumes of the World's Oceans from ETOPO1, NOAA National Geophysical Data Center, Boulder, Colorado, 2010. | | | | |
| **Ocean** | **area** | **volume** | **average depth** | |
| | **000,000 sq km** | **000,000 cu km** | **m** | **ft** |
| Atlantic Ocean | 85.133 | 310.411 | 3,646 | 11,962 |
| Pacific Ocean | 168.723 | 669.880 | 3,970 | 13,025 |
| Indian Ocean | 70.560 | 264.000 | 3,741 | 12,274 |
| Arctic Ocean | 15.558 | 18.750 | 1,205 | 3,953 |
| Southern Ocean* | 21.960 | 71.800 | 3,270 | 10,728 |
| World ocean | 361.934 | 1,335.000 | 3,688 | 12,100 |

## Largest Lakes

| Name & Location | Area sq km |
|---|---|
| Caspian Sea, Iran/Russia | 3,71,000 |
| Superior, USA/Canada | 82,100 |
| Victoria, Uganda/Kenya/Tanzania | 68,870 |
| Huron, USA/Canada | 59,600 |
| Michigan, USA | 58,000 |

- Lake Superior (Canada) is the world's largest freshwater lake by surface area.
- Caspian Sea is the world's largest salt lake. It is also the world's largest lake by surface area and volume if we exclude its characteristic saltwater.
- Kariba Lake (Zambia, Zimbabwe) is the world's largest artificial lake.
- The Dead Sea is the lowest lake in the world. It is located in Israel and Jordan.
- Titicaca (Peru) is the world's highest lake 12,500 feet above the sea level
- Great Bear Lake is the largest lake in Canada
- Lake Tana is a famous lake of Ethiopia.
- Pink Lake, also known as Lake Hilier is located in Australia.
- Red Lake is situated in America.
- Niagara Falls comes in the North American continent.

## Busiest Canals of the World

| Name | Location | Length |
|---|---|---|
| Beijing-Hangzhou Grand canal | China | 1,776 km |
| Suez Canal | Egypt | 193.30km |
| Panama Canal | Between Atlantic Ocean and Pacific Ocean | 82km |
| Corinth Canal | Greece | 6.4km |
| The White Sea-Baltic Sea Canal | Russia | 227km |
| Rhine-Main-Danube Canal | Bavaria | 171km |
| Volga-Don Canal | Russia | 101km |
| Kiel Canal | Germany | 98km |
| Houston Ship Canal | Unite States | 50 miles |
| Danube-Black Sea Canal | Western Europe | 64.4km |

## World's Largest Peninsulas

**A Peninsula is a** portion of land which is projected out into the body of water such that it is surrounded by water except the part which connects it with the mainland.

| Name | Area in sq. miles | Name | Area in sq. miles |
|---|---|---|---|
| Arabia | 1,250,006 | Deccan | 800,004 |
| Alaska | 579,153 | Labrador | 540,543 |
| Scandinavia | 289,577 | Iberian Peninsula | 224,771 |

## Ocean Terminology/ Water Bodies Terminologies

**Lagoon:**
A shallow body of water, like a pond or lake, separated from the main body of water.

**High Tide:**
The maximum elevation reached by each rising tide.

**Hurricane:**
An intense tropical cyclone with winds that move counterclockwise around a low-pressure system. Maximum sustained winds of 74 miles per hour or greater.

**Marsh:**
An area of soft, wet or periodically inundated land, generally treeless and usually characterized by grasses and other low growth.

**Mean High Water:**
The average height of the high waters recorded at a given place over a 19-year period.

**Estuary:**
The part of a river that is affected by tides. The region near a river mouth in which the freshwater of the river mixes with the saltwater of the sea.

**Estuarine:**
Pertaining to an estuary.

**Bay:**
A recess, coastal body of water set off from the main body, while having a direct connection with that body, i.e Lake, ocean. It is not large as a gulf but larger than a cove.

**Egypt**
- Abu Qir Bay

**South Africa**
- Alexander Bay
- False Bay
- Saldanha Bay
- Table Bay

**Bangladesh**
- Bay of Bengal

**China**
- Bo Hai
- Korea Bay

**Qatar**
- Peter the Great Bay

**Sri Lanka**
- Bay of Bengal

**Vietnam**
- Cam Ranh Bay
- Ha Long Bay

**Australia**
- Botany Bay
- Broken Bay
- Collier Bay
- Jervis Bay
- Keppel Bay
- Moreton Bay
- Port Phillip Bay
- Princess Charlotte Bay
- Repulse Bay
- Shark Bay

**Finland**
- Bay of Bothnia

**France**
- Bay of Biscay

**Iceland**
- Faxa Bay

**Ireland**
- Bantry Bay
- Clew Bay
- Sligo Bay

**Italy**
- Bay of Naples

**Poland**
- Gulf of Gdańsk

**Portugal**
- Gulf of Cádiz

**Spain**
- Bay of Biscay
- Bay of Cádiz

**Sweden**
- Bay of Bothnia

**United Kingdom**
- Morecambe Bay
- Manila Bay
- Keweenaw Bay

**New Zealand**
- Massachusetts Bay
- Mobile Bay
- Mount Hope Bay
- Narragansett Bay
- Passamaquoddy Bay
- Penobscot Bay
- San Francisco Bay
- Sebastián Vizcaíno Bay
- Superior Bay
- Tampa Bay
- Ungava Bay
- Whitefish Bay
- Bay of Islands
- Bay of Plenty
- Hawke Bay
- Poverty Bay

**India**
- Bay of Bengal
- Gwādar Bay

**Indonesia**
- Bay of Bengal

**North Korea**
- Korea Bay

**Myanmar (Burma)**
- Bay of Bengal

**Pakistan**
- Gwādar Bay

**Canada**
- Bay of Fundy
- Bay of Quinte
- Chaleur Bay
- Conception Bay
- Frobisher Bay
- Georgian Bay
- Hudson Bay
- James Bay
- Notre Dame Bay
- Nottawasaga Bay
- Passamaquoddy Bay
- Saginaw Bay
- Thunder Bay
- Whitefish Bay

**Costa Rica**
- Coronado Bay

**Cuba**
- Guantánamo Bay

**Dominican Republic**
- Samaná Bay

**Mexico**
- Bay of Campeche

**Panama**
- Limón Bay

**United States**
- Apalachee Bay
- Atchafalaya Bay
- Barataria Bay
- Biscayne Bay
- Bristol Bay
- Buzzards Bay
- Chesapeake Bay
- Corpus Christi Bay
- Delaware Bay
- Florida Bay
- Galveston Bay
- Glacier Bay
- Grand Traverse Bay
- Green Bay
- Irondequoit Bay
- Jamaica Bay

**Papua New Guinea**
- Milne Bay

**Argentina**
- Samborombón Bay

**Brazil**
- Guanabara Bay
- São Marcos Bay
- Todos os Santos Bay

**Ecuador**
- Academy Bay

## Famous Beaches of the World

| Name | Location |
|---|---|
| Waikki Beach | Hawaii |
| Anse Source d'Argent | Seychelles |
| Copacabana | Brazil |
| Santa Monica State Beach | California |
| Bondi Beach | Australia |
| Kamari Beach | Greece |
| Navagio Beach | Greece |
| Lover's Beach | Mexico |
| Beach of the Cathedrals | Spain |
| Tamarindo Beach | Costa Rica |
| Deauville Beach | France |
| White Heaven Beach | Australia |
| Praia de Cassino Beach | Brazil |
| Bathsheba Beach | Barbados |
| Trunk Bay Beach | U.S. Virgin Islands |
| Lido Beach | Italy |

## World's Land-Locked Countries

Sovereign countries which do not connect with any ocean or sea are called landlocked countries.

They can be grouped in contiguous groups as follows:

**Central Asia landlocked countries (6):** Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

**Central European and Balkan landlocked countries (8):** Austria, CzechRepublic, Hungary, Liechtenstein, Republic of Macedonia, Serbia, Slovakia and Switzerland

**Central African landlocked countries (5):** Burkina Faso, Central African Republic, Chad, Mali, Niger

**South African landlocked countries (4):** Botswana, Malawi, Zambia, Zimbabwe

**East African landlocked countries (3):** Burundi, Rwanda, Uganda

**Caucasian landlocked countries (2):** Armenia, Azerbaijan

**South American landlocked countries (2):** Bolivia, Paraguay

South Asian landlocked states: Afghanistan, Bhutan and Nepal.*

## Longest Glaciers

### Longest Glaciers outside Polar Regions

| Rank | Glacier | Country | Length (in km) |
|---|---|---|---|
| 1 | Fedchenko Glacier | Tajikistan | 77 |
| 2 | Siachen Glacier | Pakistan | 76 |
| 3 | Biafo Glacier | Pakistan | 67 |
| 4 | Bruggen Glacier | Chile | 66 |
| 5 | Baltoro Glacier | Pakistan | 63 |
| 6 | South Inylchek Glacier | Kyrgyzstan/China | 60.5 |
| 7 | Batura Glacier | Pakistan | 57 |

Source: worldatlas.com

**Important:** The Biafo Glacier is a 67 km (42 mi) long glacier in the Karakoram Mountains of Gilgit Baltistan, Pakistan, which meets the 49 km (30 mi) long Hispar Glacier at an altitude of 5,128 m (16,824 ft) at Hispar La (Pass) to create the world's longest glacial system outside the polar regions.

- The largest glacier of the world is Lambert-Fisher Glacier, located in Antarctica.*
- Total number of glaciers in the world is 1,98,000.*

## Mountains of the World

| | |
|---|---|
| Mount Everest | Himalayas, Nepal/China |
| Mount Fuji | Honshu Island, Japan |
| Kilimanjaro | Kilimanjaro Region, Tanzania |
| K2 | Karakoram Range, Pakistan/China |
| Mont Blanc | Alps, Italy/France |
| Annapurna | Himalayas, France |
| Mount Olympus | Olympus Range, Greece |
| Mount Sinai/Jabal Mousa | Egypt |
| Matterhorn | Alps, Switzerland/Italy |
| Khan Tengru | Tian Shan Mountain Range, China-Kyrgyzstan - Kazakhstan tripoint |

## Famous Mountain Passes

| Pass | Location | Height in feet |
|---|---|---|
| Badpo La | Tibert (China) | 19,452 |
| Namni Pass | Myanmar | 15,300 |
| Khunjerab Pass | Pakistan | 15,400 |
| Babusar Pass | Pakistan | 13,600 |
| Alpine Pass | USA | 13,550 |
| Shandur Pass | Pakistan | 12,500 |
| Lowari Pass | Pakistan | 10,500 |
| Col de Restefond | France | 9,193 |
| Great St. Bernard | Italy-Switzerland | 8,110 |
| Little St. Bernard | France | 7,179 |
| Donner | California (USA) | 7,088 |
| St. Gotthard (Alps) | Switzerland-Italy | 6,929 |
| Simplon (Alps) | Switzerland-Italy | 6,582 |
| Khojak | Balochistan (Pakistan) | 6,381 |
| Bolan (Sulaiman) | Balochistan (Pakistan) | 5,880 |
| Kolhapur | Balochistan (Pakistan) | 5,874 |
| Brenner | Italy-Austria | 4,508 |
| Stripka | Bulgaria | 4,300 |
| Khyber, Sulaiman | Khyber Pakhtunkhwa (Pakistan) | 3,370 |

## World's Highest Mountains

| Sr | Mountain | Height in feet | Range | Date of first ascent |
|---|---|---|---|---|
| ASIA | | | | |
| 1. | Mount Everest | 29,028 | Himalaya | May 29, 1953 |
| 2. | K2 (Chogori) | 28,250 | Karakoram | July 31,1954 |
| 3. | Kangchenjunga I | 28,208 | Himalaya | May 25, 1955 |
| 4. | Lhotse I | 27,923 | Himalaya | May 18, 1956 |
| 5. | Makalu I | 27,824 | Himalaya | May 15, 1955 |
| 6. | Kangchenjunga II | 27,803 | Himalaya | -- |
| 7. | Lhotse Sar | 27,504 | Himalaya | -- |
| 8. | Dhaulagiri I | 26,810 | Himalaya | May 13, 1960 |
| 9. | Manaslu I | 26,760 | Himalaya | May 9, 1956 |
| 10. | Cho Oyu I | 26,750 | Himalaya | Oct. 19, 1954 |
| 11. | Nanga Parbat | 26,660 | Himalaya | July 3, 1953 |
| 12. | Annapurna I | 26,504 | Himalaya | June 3, 1950 |
| 13. | Gasherbrum I | 26,470 | Karakoram | July 5, 1958 |
| 14. | BroadPeak I | 26,400 | Karakoram | June 9, 1957 |
| 15. | Gasherbrum II | 26,360 | Karakoram | July 7, 1956 |

| | | | | |
|---|---|---|---|---|
| 16. | Shisha Pangma | 26,291 | Himalaya | May 2, 1964 |
| 17. | Gasherbrum III | 26,090 | Karakoram | 1975 |
| 18. | Annapurna II | 26,041 | Himalaya | May 17, 1960 |
| 19. | Gasherbrum IV | 26,000 | Karakoram | Aug. 6, 1958 |
| 20. | Gyachung Kang | 25,990 | Himalaya | April 10, 1964 |
| 21. | Kangbachen | 25,925 | Himalaya | -- |
| 22. | Distaghil Sar I | 25,868 | Karakoram | June 9, 1960 |
| 23. | Himal Chuli | 25,801 | Himalaya | May 24, 1960 |
| 24. | Kunyang Chhish | 25,762 | Karakoram | -- |
| 25. | Nuptse | 25,726 | Himalaya | May 16, 1961 |
| 26 | Peak (Dakura) | 25,705 | Himalaya | October 1970 |
| 27 | Masherbrum East | 25,660 | Karakoram | July 6, 1960 |
| 28 | Nanda Devi | 25,645 | Himalaya | Aug. 29, 1963 |
| 29 | Chomo Lonzo | 25,640 | Himalaya | Oct. 30, 1954 |
| 30 | NgojumbaRi | 25,610 | Himalaya | April 24, 1965 |
| 31 | Rakaposhi | 25,550 | Karakoram | June 25, 1958 |
| 32 | BaturaPeak | 25,542 | Karakoram | July 30, 1976 |
| 33. | Kanjut Sar | 25,460 | Karakoram | July 19, 1959 |
| 34 | Kamet | 25,447 | Himalaya | June 21, 1931 |
| 35 | Namcha Barwa | 25,445 | Himalaya | -- |
| 36 | Dhaulagiri II | 25,429 | Himalaya | May 18, 1971 |
| 37. | Saltoro Kangri I | 25,400 | Karakoram | July 24, 1962 |
| 38. | Trivor | 25,370 | Karakoram | Aug. 17, 1960 |
| 39. | Gurla Mandhata | 25,355 | Himalaya | -- |
| 40 | Ulugh Muztagh | 25,340 | Kunlunshan | -- |
| 41 | Jannu | 25,294 | Himalaya | April 27, 1962 |
| 42 | Hunza Kunji II | 25,294 | Karakoram | -- |
| 43 | Saltoro Kangri II | 25,280 | Karakoram | 1962 |
| 44 | Tirich Mir | 25,263 | Hindu Kush | July 21, 1950 |
| 45 | Makalu II | 25,120 | Himalaya | Oct. 22, 1954 |

### South America

| | | | | |
|---|---|---|---|---|
| 46 | Cerro Aconcagua | 22,834 | Argentina | -- |
| 47 | Ojos del Salado | 22,590 | Argentina-Chile | -- |
| 48 | Huasca-ran, South peak | 22,205 | Peru | -- |

### North America

| | | | | |
|---|---|---|---|---|
| 49 | McKinley | 20,320 | Alaska | -- |
| 50 | Logan | 19,850 | Canada | -- |

### Africa

| | | | | |
|---|---|---|---|---|
| 51 | Kiliman-jaro | 19,340 | Tangan-yika | -- |

### Europe

| | | | | |
|---|---|---|---|---|
| 52 | Elbrus | 18,481 | -- | -- |

### Oceania

| | | | | |
|---|---|---|---|---|
| 53 | Mt.Sukarno | 17,096 | West Irian | |

### Antarctica

| | | | | |
|---|---|---|---|---|
| 54 | Vinson Massif | 16,860 | | |

Mount Everest's status as the tallest mountain at 29,028 ft. high recognized for 135 years (1852-1987) was most recently challenged by K2 (formerly known as Godwin Austen) also known as Chogori, in Kashmir, the northern area of Pakistan – India, in an announcement on March 6, 1987 by the US K2 expedition. Their satellite transit surveyor yielded attitudes of between 29,064 and 29,228 ft. However the Research Council in Rome announced on October 23, 1987 that new satellite measurements restored Everest to primacy at 29,078 ft, and put K2 down to 28,238.

## Top Seven Mountain ranges in the World (by length)

| Range Name | Continent | Approx. Length |
|---|---|---|
| Andes | South America | 7,000 km (4350 miles) |
| Southern Great Escarpment | Africa | 5,000 km (3100 miles) |
| Rocky Mountains | North America | 4800 km (3,000 miles) |
| Transantarctic | Antarctica | 3,542 km (2200 miles) |
| Great Dividing Ridge | Australia | 3,500 km (2200 miles) |
| Urals | Asia/Europe | 2,500 km (1600 km) |
| Himalayas | Asia | 2400 km (1500 miles) |

## Famous Mountains in the World

| | |
|---|---|
| Mount Everest | Himalayas, Nepal/China |
| Mount Fuji | Honshu Island, Japan |
| Kilimanjaro | Kilimanjaro Region, Tanzania |
| K2 | Karakoram Range, Pakistan/China |

| | |
|---|---|
| Mont Blanc | Alps, Italy/France |
| Annapurna | Himalayas, France |
| Mount Olympus | Olympus Range, Greece |
| Mount Sinai/Jabal Mousa | Egypt |
| Adam's Peak | Sri Lanka* |
| Matterhorn | Alps, Switzerland/Italy |
| Khan Tengri | Tian Shan mountain range, China—Kyrgyzstan—Kazakhstan tripoint |

## List of North America's Highest Mountain Peaks

| Mountain Peak | Mountain Range | Elevation (meters) |
|---|---|---|
| Denali | Alaska Range | 6190.5m |
| Mount Logan | Saint Elias Mountains | 5247m |
| Mount Foraker | Alaska range | 5304m |
| Mount Blackburn | Wrangell Mountains | 3548m |
| Mount Sanford | Wrangell Mountains | 4949m |
| Mount Vancouver | Saint Elias Mountains | 4742m |
| Nevado de Toluca | Cordillera Neovolcanica | 4690m |
| Mount Kinabu | Crocker Range | 4095m |

## Major Mountain Ranges of the World According to Continents

| Continent | Mountain Ranges |
|---|---|
| Africa | Atlas, Eastern African Highlands, Ethipian Highlands |
| Asia | Hindu Kush, Himalaya, Taurus, Elburz, Japanese Mountains |
| Australia | MacDonnell Mountains |
| Europe | Pyrenees, Alps, Carpathians, Apennines, Urals, Balkan Mountains |
| North America | Appalachians, Sierra Nevada, Rocky Mountains, Laurentides |
| South America | Andes, Brazilian Highlands |

## Highest Waterfalls:

| Waterfall | Height | Country |
|---|---|---|
| Angel Falls | 979 m | Venezuela |
| Tugela Falls | 948 m | South Africa |
| Tres Hermanas Falls | 914 m | Peru |
| Olo'upena Falls | 900 m | United States |
| Yumbilla Falls | 896 m | Peru |
| Vinnufossen | 860 m | Norway |
| Balåifossen | 850 m | Norway |
| Pu'uka'oku Falls | 840 m | United States |
| James Bruce Falls | 840 m | Canada |
| Browne Falls | 836 m | New Zealand |
| Strupenfossen | 820 m | Norway |
| Ramnefjellsfossen | 818 m | Norway |
| Wailhilau Falls | 792 m | United States |
| Colonial Creek Falls | 788 m | United States |
| Mongefossen | 773 m | Norway |

*Denmark Strait cataract: The **Denmark Strait cataract** is the world's highest undersea waterfall (3505 metres). It is on the western side of the **Denmark Strait** in the Atlantic Ocean. Niagara Falls is the waterfall that flows between America and Canada.

## Rivers of the World:

Source for lengths: World Atlas

| Rank | River | Length (miles) | Length (km) |
|---|---|---|---|
| 1 | Nile | 4,160 | 6650 |
| 2 | Amazon | 4,000 | 6436 |
| 3 | Yangtze | 3,964 | 6378 |
| 4 | Mississippi-Missouri | 3,710 | 5970 |
| 5 | Yenisei-Angara-Selenga | 3,442 | 5539 |
| 6 | Yellow | 3,398 | 5464 |
| 7 | Ob-Irtysh | 3,362 | 5410 |
| 8 | Rio de la Plata-Paraná | 3,030 | 4876 |
| 9 | Congo | 2,900 | 4700 |
| 10 | Amur-Argu-Kherlen | 2,763 | 4444 |

**Important Note**: According to the latest research amazon is considered the world's longest river. But in your exam, the examiners still might consider the Nile as the longest.

- River Thames is a world famous river located in England.

## List of Rivers Found in Canada

### Name of River

- Mackenzie River
- St Lawrence River
- Fraser River
- Yukon River
- Columbia River
- Nelson River

## List of Rivers Flowing through Washington DC

| Name | Area |
|---|---|
| White River | 75 miles |
| Spokane River | 111 miles |
| Nisqually River | 81 miles |
| Skagit River | 150 miles |
| Willapa River | 20-mile |

## Important Facts about River Nile

- River Nile is the longest river in the world, which flows for about 6,650 kilometres, starting from Lake Victoria.
- River Nile flows through the African Great Lakes through the Sahara Desert, and empties into the Mediterranean Sea.
- It flows through 11 countries, which include Tanzania, Uganda, Rwanda, Burundi, Congo, Kenya, Ethiopia, Eritrea, South Sudan, Sudan and Egypt

- The Nile has three main tributaries: the White Nile, Blue Nile and Atbara

## Delta:

A river delta is a landform that forms at the mouth of a river, where the river flows into an ocean, sea, estuary, lake, or reservoir.

## Famous Deltas:

| River | Location | Size of Delta Area square kilometers |
|---|---|---|
| Ganges-Brahmaputra | Bangladesh/India | 105,645 |
| Mekong | Southeast Asia | 93,781 |
| Lena | Russia | 43,563 |
| Huang He | China | 36,272 |
| Mississippi | United States | 33,670 |
| Indus | Pakistan | 29,524 |
| Volga | Russia | 27,224 |
| Orinoco (Amacuro) | South America | 22,500 |
| Niger | Western Africa | 19,135 |
| Tigris-Euphrates | Southwest Asia | 18,497 |

*River Narmada and St Lawrence River are without a delta

## Largest Islands

| Island | Ocean | Place | Area (sq. m.) |
|---|---|---|---|
| Australia (a continent Island) | Indian | Oceania | 29,48,366 |
| Greenland | Arctic | N. America | 8,39,782 |
| New Guinea | Pacific | Oceania | 3,16,861 |
| Borneo | Pacific | Asia | 2,85,000 |
| Baffin Islands | Arctic | N. America | 2,36,000 |
| Madagascar | Indian | Africa | 2,27,737 |
| Sumatra | Indian | Asia | 1,61,612 |
| Philippine Islands | Pacific | Indian | 1,14,400 |
| Honshu | Pacivid | Asia | 88,919 |
| Great Britain | Atlantic | Europe | 8,186 |
| Victoria Is. | Arctic | N. America | 80,450 |
| Celebes | Indian | Asia | 73,160 |
| South Island, N.Z. | Pacific | Oceania | 58,093 |
| Java | Indian | Asia | 48,534 |
| North Island, N.Z. | Pacific | Oceania | 44,281 |
| Cuba | Atlantic | N. America | 44,206 |
| Newfoundland | Atlantic | N. America | 42,734 |
| Ellesmere Is. | Arctic | N. America | 41,000 |
| Luzon | Pacific | Asia | 40,420 |
| Iceland | Atlantic | Europe | 39,758 |
| Mindanao | Pacific | Asia | 36,537 |
| Hokkaido | Pacific | Asia | 34,276 |
| Novaya Zemlya | Arctic | Asia | 32,000 |
| Ireland | Atlantic | Europe | 31,839 |
| Hispaniola | Atlantic | N. America | 29,536 |
| Tasmania | Pacific | O | 26,215 |

## Biggest Mediterranean Islands

| Name | Area |
|---|---|
| Sicily | 9,927 square miles |
| Sardinia | 9,300 square miles |
| Cyprus | 3,572 square-mile |
| Corsica | 3,350 square miles |
| Crete | 3,206 square miles |

- Montuosa

## Famous Island States of the World

| Country | Capital | Area (km sq) |
|---|---|---|
| Indonesia | Jakarta | 1,904,569 |
| Japan | Tokyo | 377,915 |
| Philippines | Manila | 300,000 |
| United Kingdom | London | 243,000 |
| Madagascar | Antananarivo | 587,041 |
| Sri Lanka | Colombo | 65,610 |
| Cuba | Havana | 109,886 |
| Haiti | Port-au-Prince | 27,750 |
| New Zealand | Wellington | 270,467 |
| Republic of Ireland | Dublin | 70,273 |
| Jamaica | Kingston | 10,991 |
| Bahrain | Manama | 741 |
| Mauritius | Port Louis | 2,040 |
| Fiji | Suva | 18,274 |
| Cyprus | Nicosia | 9,251 |
| Malta | Valletta | 5,765 |
| Bahamas | Nassau | 13,943 |
| Maldives | Male | 298 |
| Seychelles | Victoria | 455 |
| Australia | Canberra | 7.69 million |

## World's Largest Inland Water Bodies by Area

| Name | Location | Area (km sq) |
|---|---|---|
| Barents Sea | Arctic Ocean | 1.4 million |
| East China sea | Western Pacific Ocean | 1.249 million |
| Hudson Bay | Northeastern Canada | 1.23 million |
| Kara Sea | Arctic Ocean | 926,000 |
| Baltic Sea | Atlantic Ocean | 377,000 |
| Caspian Sea | Between Europe and Asia | 371,000 |
| Java Sea | Sunda Shelf | 320,000 |
| Lake Michigan-Huron | North America | 117,585 |

| | | |
|---|---|---|
| White Sea | Barents Sea | 90,000 |
| Aral Sea | Central Asia | 68,000 |
| Sea of Azov | Black Sea | 39,000 |
| Lake Ladoga | Northwestern Russia | 17,700 |
| Sea of Marmara | Turkey | 11,350 |
| Lake Onega | Northwestern Russia | 9,700 |
| Great Salt Lake | USA | 4,400 |

## Islands in Pakistan

| Island | Place |
|---|---|
| Astola Island | Balochistan Coast |
| Malan Island | Balochistan Coast |
| Zalzala Koh | Balochistan Coast |
| Shams Pir | Sindh Coast |
| Hawkes Bay | Sindh Coast |
| Bundal Island | Sindh Coast |
| Churna Island | Sindh Coast |
| Baba and Bhit Islands | Sindh Coast |

## Top Five Heaviest Rainfall Regions

| Region | Country | Rainfall |
|---|---|---|
| Mawsynram | India | 11,871 mm |
| Cherrapunji | India | 11,777 mm |
| Tutunendo | Colombia | 11,770 mm |
| Cropp River | New Zealand | 11,516 mm |
| San Antonio de Ureca | Bioko Island, Equatorial Guinea | 10,450 mm |

## Names of Straits their location and the countries/water bodies they connect.

| Name of Strait | Connects | Location |
|---|---|---|
| Malacca Strait | Andaman Sea (Indian Ocean) with the South China Sea (Pacific Ocean) | Runs between Malaysia and Sumatra Islands of Indonesia |
| Palk Strait | Palk Bay with the Bay of Bengal | Situated between Tamil Nadu state of India and Northern province of Sri Lanka |
| Sunda Strait | The Java Sea with the Indian Ocean | Situated between Indonesian Island of Java and Sumatra |
| Yucatan | Gulf of Mexico with Caribbean | Between Mexico and Cuba |
| Messina Strait | The Tyrrhenian Sea to the North with the Ionian Sea to the South within the Mediterranean. | Between Italy and Sicily |
| Bab-el-Mandeb | Red Sea with the Gulf of Aden | Located between Yemen and Djibouti (Horn of Africa) |
| Cook Strait | Tasman Sea with South Pacific Ocean | Located in New Zealand. It separates the north and south New Zealand Islands. |
| Torres Strait | Arafura Sea with Gulf of Papua | Between Papua New Guinea and Australia |
| Bass Strait | Tasman Sea with South Sea | Australia |
| Bering Strait | Bering Sea with Chukchi Sea. It separates Russia from Alaska. | Situated between Russia and Alaska |
| Bosporus Strait | Black Sea and Marmara. It forms a continental boundary between Asia and Europe | Northwest Turkey |
| Hormuz Strait | Gulf of Persia with Gulf of Oman and Arabian Sea | Oman-Iran |
| Hudson Strait | Hudson Bay with the Atlantic Ocean and Labrador Sea | Canada. It separates Baffin Island from Nunavik. |
| Gibraltar Strait | Mediterranean Sea with the Atlantic Ocean | Located between Spain And Morocco |
| Tartary Strait | Japan Sea with Okhotsk Sea | Russia |
| Formosa Strait | The South China Sea with the East China Sea | Situated between China And Taiwan |
| Dover Strait | It separates Great Britain from continental Europe | Between the North Sea and the English Channel |

- World's longest strait is Strait of Malacca
- World's busiest strait is Strait of Dover
- World's shortest strait is Bosporus

## World's Largest Coral Reefs

| Name | Location | Length |
|---|---|---|
| Great Barrier Reef | The Coral Sea | 2500 km |
| Red Sea Coral Reef | The Red Sea | 1900 km |
| New Caledonia Barrier Reef | The Pacific Ocean | 1500 km |
| The Mesoamerican Barrier Reef | The Atlantic Ocean | 943 km |
| Florida Reef | The Atlantic Ocean and Gulf of Mexico | 579 km |
| Andros Island Barrier Reef | The Bahamas | 200 km |

## World Busiest Seaports

| # | Port | Country | Region | Location |
|---|---|---|---|---|
| 1 | Shanghai | China | East Asia | Yangtze Delta |
| 2 | Singapore | Singapore | Southeast Asia | Singapore Strait |
| 3 | Shenzhen | China | East Asia | Pearl River Delta |
| 4 | Ningbo-Zhoushan | China | East Asia | Yangtze Delta |

| | | | | |
|---|---|---|---|---|
| 5 | Guangzhou | China | East Asia | Pearl River Delta |
| 6 | Busan | South Korea | East Asia | Korean Strait |
| 7 | Hong Kong | Hong Kong, China | East Asia | Pearl River Delta |
| 8 | Qingdao | China | East Asia | Yellow Sea |
| 9 | Tianjin | China | East Asia | Yellow Sea |
| 10 | Dubai | United Arab Emirates | West Asia | Arab Peninsula |
| 11 | Rotterdam | Netherlands | Europe | North Sea |
| 12 | Port Klang | Malaysia | Southeast Asia | Malacca Strait |
| 13 | Antwerp | Belgium | Europe | North Sea |
| 14 | Xiamen | China | East Asia | Taiwan Strait |
| 15 | Kaohsiung | Taiwan | East Asia | Taiwan Strait |
| 16 | Dalian | China | East Asia | Yellow Sea |
| 17 | Los Angeles | United States | North America | West Coast |
| 18 | Tanjung Pelepas | Malaysia | Southeast Asia | Malacca Strait |
| 19 | Hamburg | Germany | Europe | Elbe River |
| 20 | Long Beach | United States | North America | West Coast |

## Busiest Seaports in Southasia

| Port | Traffic |
|---|---|
| Port of Singapore | 37.2 million TEU |
| Port Klang, Malaysia | 12.3 million TEU |
| Port of Tanjung Pelepas, Malaysia | 12 million TEU |
| Port of Laem Chabang, Thailand | 8 million TEU |
| Port of Tanjung Priok, Indonesia | 7.6 million TEU |

## Famous Ports of Pakistan

| | Port | Country | Location |
|---|---|---|---|
| 1 | Gwadar Port | Pakistan | Gwadar |
| 2 | Port of Karachi | Pakistan | Karachi Harbour |
| 3 | Port Qasim | Pakistan | Arabian Sea |

## Other Important Ports of the Region

| Port | Location |
|---|---|
| Chabahar Port | Sistan-Baluchistan Province |
| Port of Jebel Ali | Dubai |
| Mumbai Port | Mumbai, India |

- According to Forbes, the world's busiest seaport is Shanghai Port, China.
- World's biggest seaport by size is Shanghai Seaport.
- Genoa is a renowned seaport of Italy located in the Mediterranean Sea.

## Some Gulfs of the World

1. **Gulf of Mexico:**
It is the largest gulf in the world. It is connected to the Atlantic Ocean by the Strait of Florida and connected to the island of Cuba by Yucatan Channel.

2. **Gulf of Oman:**
Gulf of Oman, which connects the **Arabian Sea** with the **Strait of Hormuz**, which then runs to the **Persian Gulf**.

3. **Gulf of Aden:**
Gulf of Aden is located in the **Arabian Sea** between **Yemen** and **Somalia**.

4. **Persian Gulf:**
It is located in Western Asia between **Iran** and the **Arabian Peninsula**.

5. **Gulf of Bothnia:**
Gulf of Bothnia is part of the **Baltic Sea** between **Sweden** and **Finland**.

6. **Gulf of Riga:**
The Gulf of Riga is a bay of the Baltic Sea between **Latvia** and **Estonia**.

7. **Gulf of Alaska:**
The Gulf of Alaska is an arm of the **Pacific Ocean**.

8. **Gulf of California:**
It is the smallest gulf in the world.

## Disputed Islands

| Island Name | Disputed between |
|---|---|
| Senkaku (Japan)/Diaoyu (China) | Japan, China, and Taiwan |
| Hans Island | Canada and Denmark |
| Paracel Island | China, Taiwan, and Vietnam |
| Scarborough Shoal | China, Taiwan, and the Philippines |
| Spratly Island | Vietnam, China, Taiwan, Malaysia, and the Philippines |
| Chagos Island | UK and Mauritius |
| Calero Island | Nicaragua and Costa Rica |
| Solitary Island (Korea)/ Bamboo Island (Japan) | South Korea and Japan |
| Kuril Island | Japan and Russia |
| Falkland Island | UK and Argentina |
| Imia (Greece)/Kardak (Turkey) | Greece and Turkey |
| Navassa Island | US and Haiti |
| Perejil Island | Spain and Morocco |
| Machias Seal and North Rock | US and Canada |
| Swains Island | US and New Zealand |
| Abu Musa | Iran and the UAE |

## Disputed Territories between India and China

Disputed Territories between India and China

1. Ladakh
2. Himachal Pradesh
3. Uttarakhand
4. Arunachal Pradesh

## Hotly Disputed Borders of the World

- The Korean peninsula, disputed between South and North Korea
- Antarctica, disputed between UK, France and Argentina
- Israel/Palestine
- Kashmir, disputed between Indi, Pakistan and China

## International Boundary lines

| Sr. | Name of the Boundary Line | Details |
|---|---|---|
| 1 | Marginal Line | 320 km line of fortification on the Russia-Finland border |
| 2 | Line of Actual Control | India & China on the Northern Border |
| 3 | Line of Control | India and Pakistan |
| 4 | Durand Line | Afghanistan and Pakistan |
| 5 | Radcliffe Line | India and Pakistan (its includes Bangladesh Line) |
| 6 | Blue Line | Israel & Lebanon |
| 7 | Purple Line | Israel and Syria |
| 8 | Green Line | Israel and its neighbours (Egypt, Jordan, Lebanon and Syria) |
| 9 | Mason–Dixon Line | Maryland and Pennsylvania/Delaware in Colonial America |
| 10 | Curzon Line | Poland & Russia |
| 11 | Military Demarcation Line (MDL) or Armistice Line | North Korea and South Korea |
| 12 | Mcmohan Line | India & China |
| 13 | Maginot Line | France & Germany |
| 14 | Mannerheim Line | Russia & Finland |
| 15 | Oder Neisse Line | Germany & Poland (aftermath of World War II) |
| 16 | Hindenburg Line | Poland & Germany (at the time of the First World War) |
| 17 | Siegfried Line East | France & Germany (at the time of Second World War) |
| 18 | 16 Parallel North | Angola and Namibia |
| 19 | 17th Parallel Line | North & South Vietnam |
| 20 | 20 Parallel North | Libya & Sudan |
| 21 | 22 Parallel North | Egypt & Sudan |
| 22 | 25 Parallel North | Mauritania & Mali |
| 23 | 26 Parallel North | Western Sahara & Mauritania |
| 24 | 31 Parallel North | Iraq & Iran |
| 25 | 38 Parallel North Line | North & South Korea |
| 26 | 24 Parallel North Line | Pakistan and India at the Rann of kutch |

## Countries on Equator

Ecuador
Brazil
Gabon
Democratic Republic of the Congo
Uganda
Somalia
Indonesia
Colombia
Sao Tome & Principe
Republic of the Congo
Kenya
Maldives
Kiribati

## Deserts of the World

### Deserts in Pakistan

| Name | Location |
|---|---|
| Thar Desert | Sindh |
| Thal Desert | Punjab |
| Katpana Desert | Skardu, Gilgit-Baltistan |
| Cholistan Desert | Punjab |
| Kharan Desert | Balochistan |

### Deserts in China

| Desert | Area |
|---|---|
| Badain Jaran Desert in Inner Mongolia | 1200-1700 kilometers |
| Taklimakan Desert in Xinjiang | 1000 kilometers |
| Gurbantunggut Desert in Xinjiang | 48,800 kilometers |
| Singing Sand Dunes and Crescent Moon Spring in Gansu | 60 kilometers |
| Shapotou Desert in Ningxia | 100 kilometers |

### Oldest Deserts of the World

| Desert | Country | Area | Age |
|---|---|---|---|
| Taklamakan Desert | China | 337,000 km sq | 5.3 million years |
| Sahara Desert | North Africa, Algeria, Chad, Egypt, Eritrea, Libya, Mali, Morocco, Niger, Sudan, Tunisia | 9,200,000 km sq | 7 million years |
| Atacama Desert | Northern Chile | 105,000 km sq | 10-15 million years |
| Antarctica | Antarctic region | 14,000,000 km sq | 15 million years |
| Gobi Desert | Northern and Northwestern China and Southern Mongolia | 1,295,000 km sq | 10-45 million years |
| Kalahari Desert | Southern Africa, Botswana, Namibia, South Africa | 930,000 km | 60 million years |
| Namib | Namibia, South Africa and Angola | 81,000 km sq | 55-80 million years |

## Facts related to deserts in terms of their Size, Structure, Location, etc.

- There are 4 main types of deserts:
  1. Sub- Tropical deserts are hot and dry throughout the year.
  2. Cold Desert has long dry summers and little rainfall in winters.
  3. Polar Deserts tend to be cold throughout the year.
  4. Coastal deserts have warm summers and cold winters.

## List of Famous Parks in Pakistan

| | |
|---|---|
| Margalla Hills National Park | Islamabad |
| Hazarganji Chiltan National Park | Balochistan |
| Hingol National Park | Balochistan |
| Kirthar National Park | Sindh |
| Ayubia National Park | Khyber Pakhtunkhwa |
| Chitral Gol National Park | Khyber Pakhtunkhwa |
| Sheikh Badin National Park | Khyber Pakhtunkhwa |
| Saiful Maluk National Park | Khyber Pakhtunkhwa |
| Lulusar Dodipat National Park | Khyber Pakhtunkhwa |
| Broghil Valley National Park | Khyber Pakhtunkhwa |
| Khunjerab National Park | Gilgit-Baltistan |
| Hunderab Shandur National Park | Gilgit-Baltistan |
| Deosai National Park | Gilgit-Baltistan |
| Central Karakoram National Park | Gilgit-Baltistan |
| Qurumber National Park | Gilgit-Baltistan |
| Machiara National Park | AJ & K |
| Ghamot National Park | AJ & K |
| Pir Lasura National Park | AJ & K |
| Toli Pir National Park | AJ & K |
| Musk Deer Gorez National Park | AJ & K |
| Deva Vatala National Park | AJ & K |

## List of Nicknames of Famous Places

- Queen of Arabian Sea: Kochi, India
- Land of the Kangaroo: Australia
- Land of the Golden Fleece: Australia
- Roof of World: Pamirs, Central Asia
- Yellow River: Huang Ho (China)
- Quaker City: Philadelphia, USA
- World's Loneliest Island: Tristan Da Cunha (Mid Atlantic)
- Sorrow of China: River Huang Ho (Yellow River)
- Sugar bowl of the World: Cuba
- White Man's Grave: Guinea Coast
- Spice Garden of India: Kerala
- lo Stivale (the Boot)

## Geographical Facts

### Top five Smallest States by population

| State | Population |
|---|---|
| Vatican City | 801 |
| Tuvalu | 11792 |
| Nauru | 10824 |
| Palau | 18094 |
| San Marino | 33931 |

## Facts about the Bermuda Triangle

- Bermuda Triangle is a region of the North Atlantic Ocean
- It does not appear on any world maps and the US Board on Geographical Names does not recognize it as an official region of the Atlantic Ocean.
- Since long, this has been a source of mystifying occurrences that puzzle people
- No official maps exist that delineate the boundaries of the Bermuda Triangle
- At least two mysterious incidents have taken place in the area; first was in March 1918 when the collier USS Cyclops, en route to Baltimore, Maryland, from Brazil, disappeared inside the Bermuda Triangle. Second occurred 27 years later, when a squadron of bombers (Flight 19) disappeared in the airspace above the Bermuda Triangle.
- The Bermuda Triangle is one of the most heavily traveled shipping lanes in the world.

## Famous Streets of the World

| Street | City, Country |
|---|---|
| Broadway | New York City, USA |
| La Rambla | Barcelona, Spain |
| Abbey Road | London, England |
| Champs-Élysées | Paris, France |
| Royal Mile | Edinburgh, Scotland |
| Orchard Road | Singapore |
| Hollywood Boulevard | Los Angeles, USA |

## Some Important Facts:

- Kazakhstan is the world's largest landlocked country.
- Nauru is the only country without a capital.
- Arabian Peninsula is the world's largest Peninsula.
- The largest country in the Arabian Peninsula is Saudi Arabia.
- The summer solstice is the longest day of the year that occurs on 21 June. The winter solstice is the shortest day of the year that occurs on 21 December.
- An equinox means when there is equal day and night time. March equinox (March 21 however the date can vary) occurs in the Northern hemisphere whereas September/Autumnal equinox (22 September) occurs in the southern hemisphere.
- The rotation of Earth causes day and night whereas the revolution of Earth causes seasons.
- Northern and Southern hemispheres are separated by plane from the Equator.
- Seismograph is an instrument which is used for recording earthquake waves which measure earthquake waves on the Richter scale.
- Greenland is the world's largest Island.
- Oasis is the spot in a desert where water is found.
- The Continental Drift Theory that explains how continents shift place was proposed by Alfred Wagnor in 1912.
- According to The Plate Tectonic Theory, the Earth comprises 7 major plates.
- Wind always blows from areas of high pressure to low pressure.

- Metamorphic rock composition and texture can be changed by heat or pressure on Earth.
- The approximate age of the Sun is 4.6 billion years.
- The approximate age of the Moon is 4.53 billion years.
- Approximate age of Earth is 4.54 billion years
- The Karman line is the name of the layer that separates the outer space from Earth's atmosphere. It is almost 100 km high.

**Layers of atmosphere**

| | |
|---|---|
| 1. Troposphere | -Lowest Part of the atmosphere |
| 2. Stratosphere | -Above the Troposphere<br>-Ozone Layer is present in this part |
| 3. Mesosphere | -Above the Stratosphere<br>-Temperature decreases with height in this layer |
| 4. Thermosphere | -Lies above the mesosphere<br>-Temperature increases with height |

## Four Layers of Earth:

1. The Crust (Oceanic and Continental crust)
2. The Mantle is the thickest layer of Earth. Magma is present in this layer.
3. Outer core is liquid
4. Inner core is solid

## Three Main Types of Rocks:

**Igneous Rocks:** They are formed deep inside the earth upon the cooling of the magma. They often have large crystals. Common types of igneous rocks are andesite, granite, dacite, diorite, peridotite, gabbros, tuff, and volcanic bomb.

**Sedimentary Rocks:** They are porous rocks formed by solidification of sediments. They can be formed from organic remains (like limestone) or from solidification of other rocks. Common types of sedimentary rocks are conglomerate, sandstone, mudrocks, and limestone.

**Metamorphic Rocks:** They are formed as a result of change of igneous and sedimentary rocks. They can be formed both below and above the surface of the earth. Thermal metamorphism occurs when rocks are close to magma. As a result, they partially melt and change their physical properties. Dynamic metamorphism occurs when deep below the surface and subject to massive pressure. Common metamorphic rocks are amphibolite, schist, marble, quartzite, slate, hornfels, and phyllite.

## Famous Valleys of the World

| Name | Location |
|---|---|
| Kaghan Valley | Pakistan |
| Cerce Valley | France |
| Douro Valley | Portugal |
| Lauterbrunnen | Switzerland |
| The Valley of Geysers | Russia |
| Porsmork Valley | Iceland |
| Yosemite Valley | California |
| Khumbu Valley | Nepal |
| Danum Valley | Borneo |
| Waipi'O Valley | Hawaii |
| Yangdi Valley | China |
| Napa Valley | California |
| Jiuzhaigou Valley | China |

## Three Main Geographical Zones

**The Torrid Zone:** Torrid Zone refers to the area of the earth between the Tropic of Cancer and the Tropic of Capricorn, defined by 23.5 degrees north latitude and 23.5 degrees south latitude.

**The Frigid Zone:** The areas around the North and South poles within the Polar circles.

**The Temperature Zone:** The area or region between the Tropic of Cancer and the Arctic Circle or between the Tropic of Capricorn and the Antarctic Circle.

## Caribbean States:

Antigua and Barbuda, Barbados, Cuba, Dominica, Dominican Republic, Haiti, Bahamas, Grenada, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago.

**'Bride of No Return'** is located between South and North Korea in a high security area. The prisoner exchange of 1953 was done via the bridge.

# STRUCTURES AROUND THE WORLD

## World's 20 Tallest Buildings According to Height

| Name of Building | Height in meters | Floors | Country |
|---|---|---|---|
| Burj Khalifa, Dubai | 828 | 163 | UAE |
| Merdeka (Menara Warisan Merdeka) | 678.9 | 118 | Kuala Lumpur, Malaysia |
| Shanghai Tower, Shanghai | 632 | 128 | China |
| Abraj Al Bait/ Makkah Royal Clock Tower, Makkah | 601 | 120 | Saudi Arabia |
| Ping An Finance Center, Shanzhen | 599.1 | 115 | China |
| Lotte World Tower, Seoul | 554.5 | 123 | South Korea |
| One World Trade Center, NYC | 541.3 | 94 | United States |
| Guangzhou CTF Finance Centre, Guangzhou | 530 | 111 | China |
| Tianjin CTF Finance Center, Tianjin | 530 | 97 | China |
| CITIC Tower, Beijing | 527.7 | 109 | China |
| Taipei 101, Taipei | 508 | 101 | Taiwan |
| Shanghai World Financial Centre, Shanghai | 492 | 101 | China |
| International Commerce Centre (ICC), Hong Kong | 484 | 108 | Hong Kong |

| | | | |
|---|---|---|---|
| Wuhan Greenland Center | 475.6 | | |
| Central Park Tower, NYC | 472.4 | 101 | China |
| Lakhta Center, St. Petersburg | 462 | 98 | United States |
| Vincom Landmark 81, Ho Chi Minh City | 461.2 | 87 | Russia |
| The Exchange 106 | 453.6 | 81 | Vietnam |
| Changsha IFS Tower T1, Changsha | 452.1 | 95 | Kuala Lumpur, Malaysia |
| Petronas Twin Tower 1, Kuala Lumpur | 451.9 | 94 | China |
| Petronas Twin Tower 2, Kuala Lumpur | 451.9 | 88 | Malaysia |
| | | 88 | Malaysia |

## World's Famous Libraries

- The National Library, Vienna (Austria)
- Munich State Library (Germany)
- British Museum Library (UK)
- National Library, Paris (France)
- State Library, Berlin (Germany)
- Vatican Library, Vatican State (Italy)
- Punjab Public Library, Lahore (Pakistan)
- Lenin State Library, Moscow (Russia)
- The National Library, Tokyo (Japan)
- Imperial Library, Calcutta (India)
- Punjab Public Library, Lahore (Pakistan)
- Congress Library, New York (USA)

## World's Oldest Libraries

- Library of Ashurbanipal
- Library of Alexandria
- The Library of Pergamum
- The Villa OF Papyri
- The Library of Trajan's Forum

## Famous Arches of Triumph around the World

| Name | Location | Year of Completion |
|---|---|---|
| Arc De Triomphe Du Carrousel | Paris, France | 1806-1808 |
| Arc De Triomphe De Carabobo | Carabobo, Venezuela | 1921 |
| Patuxai | Vientiane, Laos | 1957-1968 |
| Swords of Qadisiyah | Baghdad, Iraq | 1989 |
| The Arch of Triumph | Pyongyang, North Korea | 1982 |

## World's Biggest Libraries

| Name | Country | Number of items |
|---|---|---|
| Library of Congress | Washington, D. C. | 162 million |
| British Library | United Kingdom | 150 million |
| Library and Archives Canada | Canada | 54 million |
| New York Public Library | Manhattan | 53.1 million |
| Russian State Library | Moscow | 44.4 million |
| National Diet Library | Tokyo | 41.88 million |
| Bibliothèque Nationale De France | Paris | 40 million |
| National Library of Russia | St. Petersburg | 36.5 million |
| Royal Danish Library | Denmark | 35.1 million |
| The National Library of China | Beijing | 35.1 million |

## Grade I Listed Structures in England

Structures which are categorised as Grade I mean that they are historically very significant in England.

| Name | Location |
|---|---|
| Humber Bridge | Historic England |
| The British Library | King's Cross, London |
| Lloyd's Building | City of London |
| Willis Building | Ipswich |
| Kingsgate Bridge | Durham |
| Severn Bridge and Aust Viaduct | South Gloucestershire |

## Famous Citadels of the World

| Name | Location |
|---|---|
| Citadel of Ghazni | Afghanistan |
| Herat Citadel | Afghanistan |
| Mainz Citadel | Germany |
| Royal Citadel, Plymouth | United Kingdom |
| Petersberg Citadel | Germany |
| Warsaw Citadel | Poland |
| Bam Citadel | Iran |
| Cairo Citadel | Egypt |

## Cathedrals of the World

| Name | Location |
|---|---|
| Notre Dam | Paris, France |
| Cologne Cathedral | Domkloster, Germany |
| Cathedral of Santa Maria del Fiore | Firenze, Italy |
| Duomo di Milano | Milano, Italy |
| St. Paul's Cathedral | London, United Kingdom |
| St. Basil's Cathedral | Moscow, Russia |
| Catedral de Sevilla | Sevilla, Spain |
| St. Patrick's Cathedral | New York, United States |
| St. Stephen's Cathedral | Wien, Austria |

| | |
|---|---|
| St. Vitus Cathedral | Prague, Czech Republic |
| Salisbury Cathedral | Salisbury, United Kingdom |
| Cathedral of Brasilia | Brazil |
| York Minster | York, United Kingdom |
| Burgos Cathedral | Burgos, Spain |
| Westminster Abbey | London, United Kingdom |
| Washington National Cathedral | Washington, D. C. United States |
| Canterbury Cathedral | Canterbury, United Kingdom |
| Lincoln Cathedral | Lincoln, United Kingdom |
| Winchester Cathedral | Winchester, United Kingdom |
| Bourges Cathedral | Bourges, France |
| Berlin Cathedral | Berlin, Germany |
| Durham Cathedral | Durham, United Kingdom |
| St. Isaac's Cathedral | St. Petersburg, Russia |
| Catterdrale di Pisa | Pisa, Italy |

## Longest Bridges of the World

| Bridge | Country | Length |
|---|---|---|
| Danyang-Kunshan Grand Bridge | China | 102 miles |
| Changua-Kaohsiung Viaduct | China | 98 miles |
| Tianjin Grand Bridge | China | 70 miles |
| Cangde Grand Bridge | China | 66 miles |
| Weinan Weihe Grand Bridge | China | 50 miles |
| Bang Na Expressway | Thailand | 34 miles |
| Beijing Grand Bridge | China | 30 miles |
| Lake Pontchartrain Causeway | United States | 24 miles |
| Line 1 (Wehan Metro) | China | 24 miles |
| Manchac Swamp Bridge | United States | 23 miles |

## World's Longest Sea Crossing Bridge

- Chinese President Xi Jinping has officially opened the world's longest sea crossing bridge, nine years after construction first began.
- Including its access roads, the bridge spans 55km (34 miles) and connects Hong Kong to Macau and the mainland Chinese city of Zhuhai.

## Largest Cemeteries of the World

| Name | Location |
|---|---|
| Wadi-us-Salaam (Valley of Peace) | Najaf, Iraq |
| Calverton National Cemetery | Calverton, New York |
| Abraham Lincoln National Cemetery | Chicago, Illinois |
| Ohlsdorf Cemetery | Hamburg, Germany |
| Karacaahmet Cemetery | Istanbul, Turkey |
| Rookwood Cemetery | Sydney, Australia |
| Spring Grove Cemetery | Ohio, United States |

## Famous Palaces of the World

| Palace | Location |
|---|---|
| Palace of Versailles | France |
| Grand Kremlin Palace | Russia |
| Schonbrunn Palace | Vienna |
| Topkapi Palace | Turkey |
| Alhambra | Spain |
| Potala Palace | China |
| Winter Palace | Russia |
| Mysore Palace | India |
| Buckingham Palace | United Kingdom |
| Summer Palace | China |
| Windsor Castle | United Kingdom |
| Royal Palace of Madrid | Spain |
| Pitti Palace | Italy |
| Luxembourg Palace | France |
| The Royal Palace | Sweden |
| Royal Palace Amsterdam | Netherlands |
| St James's Palace | United Kingdom |
| Amber Palace | India |

## Famous Defunct Airlines of the World

| | | |
|---|---|---|
| Lakers Airways Skytrain | 1982 | England |
| Braniff international Airways | 1982 | |
| Eastern Air Lines: | 1991 | United States |
| Midway Airlines | 1991 | United States |
| Interflug | 1991 | East Germany |
| Pan American World Airways | 1991 | United States |
| Tower Air | 2000 | NewYork, United States |
| Ansett Australia | 2001 | Australia |
| Sabena | 2001 | Belgium |
| SwissAir | 2002 | Switzerland |
| Kingfisher | 2005 | India |
| Monarch Airlines | 2017 | United Kingdom |
| PAN American Airways | 1991 | United States |
| Trans World Airlines | 2001 | United States |

## Some International Airlines

| Name | Country |
|---|---|
| Aegean Airlines | Greece |
| Aer Lingus | Ireland |
| Aero Asia | Pakistan |
| Aeroflot | Russia |
| Aerosvit | Ukraine |
| Air Astana | Kazakhstan |
| Air Bagan | Myanmar |
| Air Baltic | Latvia |
| Airblue | Pakistan |
| Air Canada | Canada |
| Air china | China |
| Air Europe | Spain |
| Air France | France |
| Air India | India |
| Air Koryo | North Korea |

| | |
|---|---|
| St. Vitus Cathedral | Prague, Czech Republic |
| Salisbury Cathedral | Salisbury, United Kingdom |
| Cathedral of Brasilia | Brazil |
| York Minster | York, United Kingdom |
| Burgos Cathedral | Burgos, Spain |
| Westminster Abbey | London, United Kingdom |
| Washington National Cathedral | Washington, D. C. United States |
| Canterbury Cathedral | Canterbury, United Kingdom |
| Lincoln Cathedral | Lincoln, United Kingdom |
| Winchester Cathedral | Winchester, United Kingdom |
| Bourges Cathedral | Bourges, France |
| Berlin Cathedral | Berlin, Germany |
| Durham Cathedral | Durham, United Kingdom |
| St. Isaac's Cathedral | St. Petersburg, Russia |
| Catterdrale di Pisa | Pisa, Italy |

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| Bridge | Country | Length |
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| Name | Location |
|---|---|
| Wadi-us-Salaam (Valley of Peace) | Najaf, Iraq |
| Calverton National Cemetery | Calverton, New York |
| Abraham Lincoln National Cemetery | Chicago, Illinois |
| Ohlsdorf Cemetery | Hamburg, Germany |
| Karacaahmet Cemetery | Istanbul, Turkey |
| Rookwood Cemetery | Sydney, Australia |
| Spring Grove Cemetery | Ohio, United States |

## Famous Palaces of the World

| Palace | Location |
|---|---|
| Palace of Versailles | France |
| Grand Kremlin Palace | Russia |
| Schonbrunn Palace | Vienna |
| Topkapi Palace | Turkey |
| Alhambra | Spain |
| Potala Palace | China |
| Winter Palace | Russia |
| Mysore Palace | India |
| Buckingham Palace | United Kingdom |
| Summer Palace | China |
| Windsor Castle | United Kingdom |
| Royal Palace of Madrid | Spain |
| Pitti Palace | Italy |
| Luxembourg Palace | France |
| The Royal Palace | Sweden |
| Royal Palace Amsterdam | Netherlands |
| St James's Palace | United Kingdom |
| Amber Palace | India |

## Famous Defunct Airlines of the World

| | | |
|---|---|---|
| Lakers Airways Skytrain | 1982 | England |
| Braniff international Airways | 1982 | |
| Eastern Air Lines: | 1991 | United States |
| Midway Airlines | 1991 | United States |
| Interflug | 1991 | East Germany |
| Pan American World Airways | 1991 | United States |
| Tower Air | 2000 | NewYork, United States |
| Ansett Australia | 2001 | Australia |
| Sabena | 2001 | Belgium |
| SwissAir | 2002 | Switzerland |
| Kingfisher | 2005 | India |
| Monarch Airlines | 2017 | United Kingdom |
| PAN American Airways | 1991 | United States |
| Trans World Airlines | 2001 | United States |

## Some International Airlines

| Name | Country |
|---|---|
| Aegean Airlines | Greece |
| Aer Lingus | Ireland |
| Aero Asia | Pakistan |
| Aeroflot | Russia |
| Aerosvit | Ukraine |
| Air Astana | Kazakhstan |
| Air Bagan | Myanmar |
| Air Baltic | Latvia |
| Airblue | Pakistan |
| Air Canada | Canada |
| Air china | China |
| Air Europe | Spain |
| Air France | France |
| Air India | India |
| Air Koryo | North Korea |

| | |
|---|---|
| Alitalia | Italy |
| Ariana Airlines | Afghanistan |
| Asiana Airlines | South Korea |
| Atlantic Airways | Faroe Islands |
| Belavia Airlines | Belarus |
| Bhoja Air | Pakistan |
| Biman Bangladesh Airlines | Bangladesh |
| British Airways | United Kingdom |
| Cathay Pacific | Hong Kong |
| China Airlines (CAL) | Taiwan |
| Drukair | Bhutan |
| El Al Israel Airlines | Israel |
| Emirates | United Arab Emirates |
| Etihad Airways | United Arab Emirates |
| Finnair | Finland |
| Garuda | Indonesia |
| Gulf Air | Bahrain |
| Iraqi Airways | Iraq |
| Japan Airlines | Japan |
| Jat Airways | Serbia |
| KLM (Royal Dutch Airlines) | Netherlands |
| Lufthansa | Germany |
| Luxair | Luxembourg |
| MEA (Middle East Airlines-Air Liban) | Lebanon |
| Pakistan International Airlines (PIA) | Pakistan |
| Qantas | Australia |
| Royal Jordanian Airlines | Jordan |
| Royal Nepal Airlines | Nepal |
| Saudi Arabian Airlines | Saudi Arabia |
| Scandinavian Airlines | System operated jointly by Denmark, Norway and Sweden |
| Shaheen Air | Pakistan |
| Singapore Airlines (SIA) | Singapore |
| Swissair | Switzerland |
| Thai International Airlines | Thailand |
| Yemenia Airways | Yemen |

## INTERNATIONAL AIRPORTS

### Busiest Airports in the World

| Rank | Airport | Location | Country |
|---|---|---|---|
| 1 | Hartsfield–Jackson Atlanta International Airport | Atlanta, Georgia | United States |
| 2 | Beijing Capital International Airport | Chaoyang-Shunyi, Beijing | China |
| 3 | Dubai International Airport | Garhoud, Dubai | United Arab Emirates |
| 4 | Los Angeles International Airport | Los Angeles, California | United States |
| 5 | Tokyo Haneda Airport | Ōta, Tokyo | Japan |
| 6 | O'Hare International Airport | Chicago, Illinois | United States |
| 7 | London Heathrow Airport | Hillingdon, London | United Kingdom |
| 8 | Hong Kong International Airport | Chek Lap Kok, Islands, New Territories | Hong Kong SAR, China |
| 9 | Shanghai Pudong International Airport | Pudong, Shanghai | China |
| 10 | Charles de Gaulle Airport | Roissy-en-France, Île-de-France | France |
| 11 | Amsterdam Airport Schiphol | Haarlemmermeer, North Holland | Netherlands |
| 12 | Indira Gandhi International Airport | Delhi | India |
| 13 | Guangzhou Baiyun International Airport | Baiyun-Huadu, Guangzhou, Guangdong | China |
| 14 | Frankfurt Airport | Frankfurt, Hesse | Germany |
| 15 | Dallas/Fort Worth International Airport | Dallas-Fort Worth, Texas | United States |
| 16 | Seoul Incheon International Airport | Incheon | South Korea |
| 17 | Istanbul Atatürk Airport | Yeşilköy, Istanbul | Turkey |
| 18 | Soekarno–Hatta International Airport | Tangerang, Banten | Indonesia |
| 19 | Singapore Changi Airport | Changi, East Region | Singapore |
| 20 | Denver International Airport | Denver, Colorado | United States |

### List of Deadliest Air Crashes

| Flight | Date | Fatalities |
|---|---|---|
| Turkish Airlines Flight 981 | March 3, 1974 | 346 |
| KLM Flight 4805 and Pan Am Flight 1736 | March 27, 1977 | 583 |
| American Airlines Flight 191 | May 25 1979 | 272 |

| | | |
|---|---|---|
| Saudia Flight 163 | August 19, 1980 | 301 |
| Air India Flight 182 | June 23, 1985 | 329 |
| Japan Airlines Flight 123 | August 12, 1985 | 520 |
| Iran Air Flight 655 | July 3, 1988 | 290 |
| Saudia Flight 763 and Kazakhstan Airlines Flight 1907 | November 12, 1996 | 349 |
| Malaysia Airlines Flight 370 | March 8, 2014 | 275 |
| Malaysia Airlines Flight 17 | July 17, 2014 | 298 |
| Iranian Air Force Ilyushun II-76 | February 19, 2003 | 275 |

## World's Largest Dams

| Name | Country | Type |
|---|---|---|
| Three Gorges | China | Gravity |
| Tarbela* | Pakistan | Earth |
| Fort Peck | United States | Earth |
| Oahe | United States | Earth |
| Oroville | United States | Earth |
| San Luis | United States | Earth |
| Mangla | Pakistan | Earth |
| Garrison | United States | Earth |
| W.A.C Bennett Dam | Canada | Earth |
| Gardiner Dam | Canada | Earth |
| Aswan | Egypt | Earth |

*World's largest earth-filled dam.

One of the most beautiful dams in the world is Hoover Dam located in Canada.

## World's Famous Dams

| Name | Country/city |
|---|---|
| Hoover Dam | Nevada/Arizona, United States |
| Three Gorges Dam | Hubei, China |
| The Karun-3 Dam | Khuzestan, Iran |
| The Inguri Dam | Jvari, Georgia |
| Vajont | Erto E Casso, Italy |
| Sand Dams | Kenya |
| Beaver Dam | Wood Buffalo Park, Canada |

## List of China's Largest Dams

| Name | Region, province or city | Storage capacity | Year of construction |
|---|---|---|---|
| Baihetan Dam | Sichuan | 17,924,000,000 meter cube | 2021 |
| Lower Baoquan Dam | Henan Province | 16,500,000,000 meter cube | 1994 |
| Danjiangkou Dam | Hubei Province | 17,450,000,000 meter cube | 1973 |
| Fengman Dam | Jilin Province | 11,460,000,000 meter cube | 1953 |
| Jinping Dam-I | Sichuan Province | 7,700,000,000 meter cube | 2013 |
| Longtang Dam | Hainan Province | | 2011 |
| Nuozhadu Dam | Yunnan Province | 21,749,000,000 meter cube | 2014 |

## Dams in Ghana

| Dam name | Year of construction | Total volume/area |
|---|---|---|
| Akosombo Dam | 1965 | 7.92 million meters cube |
| Kpong Dam | 1976-1982 | |
| Bui Dam | 2009 | 1,000,000 meters cube |

## History's Most Famous Walls

| Walls | Location |
|---|---|
| Berlin Wall | East Germany |
| Great Wall of China | Beijing |
| Green Monster, Fenway Park, Boston | Boston |
| Vietnam Memorial | Washington D.C, U.S |
| Walls of Jericho | Jericho, Palestine |
| Walls of Troy | Hills of Hissarlik |
| The Western (Wailing) Wall | Jerusalem |
| Walls of Kremlin | Russia |
| Forbidden City | China |
| Wall Street | U.S |
| Alcatraz Prison | San Francisco, California, U.S |
| Sistine Chapel | Vatican City |
| The Atlantic Wall | Coast of Continental Europe and Scandinavia |

- The Berlin Wall was demolished on 9th November, 1989.

# POLITICS OF THE WORLD

## Important Defence Secretaries of United States

| Name | Tenure |
|---|---|
| James V. Forrestal | 1947-1949 |
| Robert McNamara | 1961-1968 |
| Donald Rumsfeld | 1975-1977, 2001-2006 |
| Caspar "Cap" Weinberger | 1981-1987 |
| Richard B. Cheney | 1989-1993 |

## Famous US Secretaries of State

1. Michael R. Pompeo (2018-2021)
2. Hillary Rodham Clinton (2009-2013)
3. Henry A. (Heinz Alfred) Kissinger (1973-1977)
4. William Rufus Day (1898-1898)
5. Henry Clay (1825-1829)
6. James Monroe (1811-1817)
7. James Madison (1801-1809)
8. Thomas Jefferson (1790-1793)

## List of some famous leaders of the world

| Leader's name | Country |
|---|---|
| Mohandas Karamchand Gandhi | India |
| Nelson Mandela | South Africa |
| Napoleon Bonaparte | France |
| Franklin D. Roosevelt | United States of America |
| Vladimir Lenin | Soviet Union |
| Che Guevera | Argentina |
| Rosa Luxemburg | Germany |
| Hugo Shavez | Venezuela |
| Mao Zedong | China |
| Adolf Hitler | Germany |
| Hi Chi Minh | Vietnam |
| Fidel Castro | Cuba |
| Martin Luther King Jr | United States |
| Quaid e Azam | Pakistan |
| Fatima Ali Jinnah | Pakistan |
| Abraham Lincoln | United States |
| Mother Teresa | India |
| Greta Thunberg | Germany |
| John F Kennedy | United States |
| Vladimir Putin | Russia |
| Mohammed bin Rashid Al Maktoum | Dubai |
| Otto von Bismarck | Germany |
| Ferdinand Marcho | Philippines |
| Pierre Trudeau | Canada |
| Dalai Lama | Tibet |
| Sardar Vallabhbhai Patel | India |

## List of Presidents after Russian Federation was established in 1991

| Term of Office | President |
|---|---|
| 1991-1999 | Boris Yeltsin |
| 1999-2008 1st & 2nd term) | Vladimir Putin |
| 2008-2012 | Dmitry Medvedev |
| 2012-present (3rd and 4th term) | Vladimir Putin |

## Names of official residence of heads of states

| Name of Residence | Head of State |
|---|---|
| La Fortaleza | Official residence of the Governor of Puerto Rico |
| Koninklijk Paleis Amsterdam | Official residence of Queen Beatrix of Netherlands |
| Drottningholm Palace | Official residence of Swedish royal family |
| Hofburg Imperial Palace | Official residence of president of Austria |
| Tokyo Imperial Palace | Official residence of emperor of Japan |
| Palacio Real | Official residence of king of Spain |
| White House | Official residence of the president of USA |
| Moscow Kremlin | Official residence of the president of Russia |

## Countries and their Parliaments

| COUNTRY | PARLIAMENT |
|---|---|
| Afghanistan | Shora |
| Albania | People Assembly |
| Algeria | National People's Assembly |
| Angola | National People's Assembly |
| Argentina | National Congress |
| Australia | Federal Parliament |
| Austria | National Assembly |
| Bahrain | National Assembly |
| Bangladesh | Jatiya Sangsad |
| Bahamas | General Assembly (House of Assembly and Senate) |
| Belize | National Assembly |
| Benin | National Revolutionary Assembly |
| Bhutan | Tshogdu (National Assembly) |
| Bolivia | National Congress |
| Botswana | National Assembly |
| Brazil | National Congress |
| Britain | Parliament (House of Commons and House of Lords) |
| Bulgaria | National Assembly |
| Burkina Faso | National Assembly |
| Cambodia | National Assembly |
| Canada | Parliament (House of Commons and Senate) |
| Chad | National Assembly |
| Chile | National Congress |
| China, (Mainland) | National People's Congress |
| China, (National) | National Assembly |
| Colombia | Congress |
| Cuba | National Assembly of People's Power. |
| Cyprus | House of Representatives |
| Czechoslovakia | Federal Assembly |

| | |
|---|---|
| Denmark | Folketing |
| Japan | National Diet* |
| Ecuador | National Chamber of Representatives |
| Egypt | People's Assembly |
| Ethiopia | National Assembly |
| Finland | Eduskunta/Riksdagen |
| France | Parliament |
| Germany | Bundesrat |
| Ghana | National Assembly |
| Greece | Parliament |
| Guatemala | National Congress |
| Guyana | National Assembly |
| Hungary | National Assembly |
| Iceland | Althing |
| India | Parliament (Lok Sabha and Rajya Sabha) |
| Indonesia | People's Consultative Assembly |
| Iran | Majlis |
| Iraq | National Assembly |
| Ireland | Oireachtas or National Parliament (Dail Eireann, House of Representatives and Sea and Eireann Senate) |
| Israel | Knesset |
| Italy | Parliament |
| Japan | Diet |
| Jordan | National Assembly |
| Kenya | National Assembly |
| Korea (North) | Supreme People's Assembly |
| Korea (South) | National Assembly |
| Kuwait | National Assembly |
| Laos | People's Supreme Assembly |
| Lebanon | National Assembly |
| Libya | General People's Congress |
| Liberia | National Assembly |
| Liechtenstein | Diet |
| Madagascar | Popular National Assembly |
| Malaysia | Parliament |
| Maldives | Citizen's Assembly |
| Mali | National Assembly |
| Malta | House of Representatives |
| Mauritania | National Assembly |
| Mauritius | National Assembly |
| Mexico | National Congress |
| Mongolia | People's Great Hural |
| Morocco | Majlis-al-Nuwab |
| Mozambique | People's Assembly |
| Myanmar | Pyithu Hluttaw (People's Assembly) |
| Namibia | National Assembly |
| Nauru | Parliament |
| Nepal | National Assembly |
| Netherlands | Staten General |
| New Zealand | House of Representatives |
| Nicaragua | National Constituent Assembly |
| Niger | National Development Council |
| Nigeria | National Assembly |
| Norway | Storting |
| Oman | Consultative Assembly |
| Pakistan | National Assembly, Senate |
| Panama | National Assembly |
| Papua(New Guinea) | National Parliament. |
| Peru | Congress |
| Philippines | Congress |
| Poland | National Assembly |
| Portugal | Assembly of the Republic |
| Qatar | Advisory Council |
| Romania | Grand National Assembly |
| Russia | Supreme Soviet |
| Senegal | National Assembly |
| Singapore | Parliament |
| Seychelles | People's Assembly |
| Somalia | People's Assembly |
| South Africa | House of Assembly |
| Spain | Cortes |
| Sri Lanka | Parliament |
| Sudan | National Assembly |
| Surinam | Staten |
| Sweden | Riksdag |
| Switzerland | Federal Assembly (Nationalist) |
| Syria | People's Council and Standerat) |
| Tanzania | National Assembly |
| Thailand | National Assembly |
| Tunisia | National Assembly |
| Turkey | Grand National Assembly |
| Uganda | National Resistance Council |
| UAE | Federal National Assembly |
| United Kingdom | Parliament |
| U.S.A. | Congress (House of Representatives and Senate) |
| Uruguay | Council of States |
| Venezuela | National Congress |
| Vietnam | National Assembly |
| Yemen | Presidential Council |
| Zaire | National Legislative Council |
| Zambia | National Assembly |
| Zimbabwe | Parliament |

## Parliamentary Terminologies:

- A shadow cabinet consists of opposition members led by the Leader of the Opposition. This cabinet scrutinizes the policies and actions of the government.
- A hung parliament is when no single party has a majority in parliament.
- A forward block in politics means a break away block from the political party.
- A zero hour in parliament is the hour that begins immediately after Question hour. During zero hour members can raise any matter of utmost importance without prior notice.
- Caucus is a group composed of Senators and Members of Parliament from the same political party or faction.
- A standing committee is a permanent committee that reviews and corresponds on public policy and legislation matters.
- Hansard is the official record of debates conducted in both houses of parliament.
- Quorum is the minimum number of Senators or Members of Parliament which should be present in parliament to conduct the session.

| | |
|---|---|
| Denmark | Folketing |
| Japan | National Diet* |
| Ecuador | National Chamber of Representatives |
| Egypt | People's Assembly |
| Ethiopia | National Assembly |
| Finland | Eduskunta/Riksdagen |
| France | Parliament |
| Germany | Bundesrat |
| Ghana | National Assembly |
| Greece | Parliament |
| Guatemala | National Congress |
| Guyana | National Assembly |
| Hungary | National Assembly |
| Iceland | Althing |
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| Korea (South) | National Assembly |
| Kuwait | National Assembly |
| Laos | People's Supreme Assembly |
| Lebanon | National Assembly |
| Libya | General People's Congress |
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| Madagascar | Popular National Assembly |
| Malaysia | Parliament |
| Maldives | Citizen's Assembly |
| Mali | National Assembly |
| Malta | House of Representatives |
| Mauritania | National Assembly |
| Mauritius | National Assembly |
| Mexico | National Congress |
| Mongolia | People's Great Hural |
| Morocco | Majlis-al-Nuwab |
| Mozambique | People's Assembly |
| Myanmar | Pyithu Hluttaw (People's Assembly) |
| Namibia | National Assembly |
| Nauru | Parliament |
| Nepal | National Assembly |
| Netherlands | Staten General |
| New Zealand | House of Representatives |
| Nicaragua | National Constituent Assembly |
| Niger | National Development Council |
| Nigeria | National Assembly |
| Norway | Storting |
| Oman | Consultative Assembly |
| Pakistan | National Assembly, Senate |
| Panama | National Assembly |
| Papua(New Guinea) | National Parliament. |
| Peru | Congress |
| Philippines | Congress |
| Poland | National Assembly |
| Portugal | Assembly of the Republic |
| Qatar | Advisory Council |
| Romania | Grand National Assembly |
| Russia | Supreme Soviet |
| Senegal | National Assembly |
| Singapore | Parliament |
| Seychelles | People's Assembly |
| Somalia | People's Assembly |
| South Africa | House of Assembly |
| Spain | Cortes |
| Sri Lanka | Parliament |
| Sudan | National Assembly |
| Surinam | Staten |
| Sweden | Riksdag |
| Switzerland | Federal Assembly (Nationalist) |
| Syria | People's Council and Standerat) |
| Tanzania | National Assembly |
| Thailand | National Assembly |
| Tunisia | National Assembly |
| Turkey | Grand National Assembly |
| Uganda | National Resistance Council |
| UAE | Federal National Assembly |
| United Kingdom | Parliament |
| U.S.A. | Congress (House of Representatives and Senate) |
| Uruguay | Council of States |
| Venezuela | National Congress |
| Vietnam | National Assembly |
| Yemen | Presidential Council |
| Zaire | National Legislative Council |
| Zambia | National Assembly |
| Zimbabwe | Parliament |

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- Quorum is the minimum number of Senators or Members of Parliament which should be present in parliament to conduct the session.

## National Emblems of Various Countries

| COUNTRY | EMBLEMS |
|---|---|
| Australia | Kangaroo, Wattle (Australian acacia) |
| Britain | Lion, Rose |
| Bangladesh | Water Lily |
| Barbados | Head of a trident |
| Belgium | Lion |
| Canada | White Lily (Flower emblem: Maple leaf) |
| China | Narcissus |
| Chile | Candor and huemul (small American deer) |
| Denmark | Beach |
| Dominica | Sisserou Parrot |
| Egypt | Lotus |
| France | Lily |
| Germany | Cornflower |
| Guyana | Canje Pheasant |
| Hong Kong | Bauhinia (orchid tree) |
| India | Lioned capital (Flower emblem: Lotus) |
| Iran | Rose |
| Ireland | Sham rock (Harp) |
| Israel | Candelabrum |
| Italy | White Lily |
| Ivory Coast | Elephant |
| Japan | Chrysanthemum |
| Kuwait | Falcon |
| Lebanon | Cedar tree |
| Luxembourg | Lion with Crown |
| Mexico | Nopal cactus |
| Mongolia | The soyombo (Diagram for freedom and independence) |
| Netherland | Lion |
| New Zealand | Southern cross, Fern, Kiwi |
| Norway | Lion |
| Pakistan | Crescent, Jasmine |
| Papua New Guinea | Bird of Paradise |
| Spain | Eagle, Pomegranate |
| Scotland | Thistle |
| Senegal | Baobab tree |
| Sierra Leone | Lion |
| Sri Lanka | Lion |
| South Africa | Springbok |
| Sudan | Secretary bird |
| Switzerland | Edelweiss |
| Syria | Eagle |
| Turkey | Crescent and Star |
| USA | GoldenRod, Bald Eagle |
| Zimbabwe | Zimbabwe bird |

## List of National Flowers in different Countries

| Country | National Flower |
|---|---|
| Afghanistan | Tulip |
| Argentina | Ceibo |
| Australia | Golden Wattle |
| Austria | Edelweiss |
| Bangladesh | White Water Lily |
| Barbados | Pride of Barbados |
| Belgium | Red Poppy |
| Bermuda | Sisyrinchium bermudiana |
| Bhutan | Blue Poppy |
| Bolivia | Cantuta |
| Brazil | Cattleya labiata |
| Bulgaria | Rose |
| Chile | Copihue |
| Colombia | Cattleya Orchid |
| Cuba | Mariposa |
| Cyprus | Cyclamen |
| Denmark | Marguerite Daisy |
| Egypt | Lotus |
| England | Rose, Tudor Rose |
| Finland | Lily of the Valley |
| France | Iris |
| Germany | Cornflower |
| Hungary | Tulip |
| India | Lotus |
| Indonesia | Puspa Bangsa |
| Iraq | Red Rose |
| Ireland | Shamrock |
| Israel | Cyclamen |
| Japan | Cherry Blossom |
| Jordan | Black Iris |
| Malaysia | Hibiscus |
| Mexico | Dahlia |
| Myanmar | Padauk |
| Netherlands | Tulip |
| New Zealand | Kowhai |
| Norway | Purple Heather (Callunna Vulgaris) |
| Pakistan | Jasmine |
| Philippines | Jasminum Sambac |
| Poland | Corn Poppy |
| Portugal | Lavender |
| Puerto Rico | Flor de Maga |
| Romania | Dog rose |
| Russia | Chamomile |
| Scotland | Thistle |
| Singapore | Vanda Miss Joaquim |
| South Africa | King Protea |
| South Korea | Hibiscus |
| Spain | Carnation |
| Sri Lanka | Blue Lily |
| Switzerland | Edelweiss |
| Taiwan | Plum Blossom |
| Thailand | Cassia Fistula Linn |
| United States of America | Rose |
| Vietnam | Lotus |
| Zimbabwe | Flame Lily |

## Meaning of flags of different countries

| Country | Flag | Meaning |
|---|---|---|
| United Kingdom | Union Jack | Patron Saints of England, Wales, Scotland and Ireland |
| Nigeria | Three equal stripes of white and green | green color represents the nation's lush vegetation, the white signifies the country's desire for peace and unity |
| South Korea | Taegukgi (great polarity) | White color represent Korean people, the emblem represent cosmic forces and the four black trigrams represent earth, heaven, water and fire |
| United States of | Old Glory or the stars and the | 13 stripes representing the original 13 colonies, 50 |

| | | |
|---|---|---|
| America | stripes | stars denote the 50 individual states of the nation and red color signifies hardiness and valor, the blue represents vigilance and justice |
| Bangladesh | red circle on a green background | The red color denotes the rising sun and the sacrifices made by the nation's people for their independence and green color signifies country's greenery and vitality |

## Facts about the Communist Flag

- The Communist Flag is red in colour
- The symbol of the flag is a hammer and sickle, with a golden star on top.
- Different names for it are: Flag of the Soviet Union, The Hammer and Sickle, The Red and Gold, The Red Banner
- It was adopted in 1922

## Major Political Parties of the World

| Country | Political Parties |
|---|---|
| Afghanistan: | Hezb-i-Islami, Harkat-i-Islami, Hezb-i-Wahdat, Daiyer Ittehad-i-Islami. |
| Australia: | Australian Labour Party, Liberal Party National Party, Australian Democratic Labour Party. |
| Austria: | Socialist Party of Austria, Austrian People's Party, Freedom Party of Austria, United Greens of Austria, Communist Party. |
| Canada: | Liberal Party, Progressive Conservative Party, New Democratic Party, Social Credit Party, Christian Democratic Party, Radical Party. |
| China: | Communist Party (1921) |
| Denmark: | Social Democratic Party, Liberal Party, Radical Liberal Party, Conservative People's Party, Socialist People's Party. |
| Egypt: | National Democratic Party, National Progressive Unionist Party, Socialist Labour Party, Socialist Liberal Party. |
| France: | Centre of Social Democrats, Communist Party, Democratic Social Movement, National Front, Union of Democrats for the Republic, Rassemblement Pour La République, National Federation of Independent Republicans, Radical Party, Social Party, Union Pour La Democratic Francaise. |
| Germany: | Christian Democratic Union, Christian Social Union, Social Democratic Party, Freedom Democratic Party, Party of Democratic Socialism. |
| Greece: | New Democracy Party, United Democratic Left, Progressive Party, Communist Party. |
| India: | Congress I , Indian National Congress, Bharatiya Janata Party, Communist Party of India, People's Party (Lok Dal). |
| Indonesia: | Development Unity Party, Golkar, Indonesian Democracy Party. |
| Iran: | New Iran Party, People's Party, Pan-Iran Party, Islamic Republican Party, Muslim People's Republican Party. |
| Iraq: | Ba'ath Arab Socialist Party. |
| Italy: | Christian Democrat Party, Communist Party, Socialist Party, Italian Social Democratic Party, Republican Party, Italian Social Movement, National Democracy. |
| Japan: | Liberal Democratic Party, Japan Socialist Party, Democratic Socialist Party, Japan Communist Party, Clean Government Party, New Liberal Club. |
| Korea: | Democratic Justice Party, The New Korea Democratic Party. |
| Netherlands: | The Christian Democratic Appeal, Labour Party, People's Party for Freedom and Democracy. |
| Pakistan: | Jamat-e-Islami, Awami National Party, Pakistan Awami Tehrik, MQM, PNP, Jamhoori Watan Party, Pakistan Muslim League (N), Pakistan Peoples Party, Pakistan Tehreek-i-Insaaf Jamiat-a-Ulemai Islam. |
| Azad Kashmir (Pakistan) | Muslim Conference, Azad Jamu Kashmir Peoples Party, Jamat-e-Islami.PML |
| South Africa: | National Party, Progressive Federal Party. |
| Spain: | Spanish Socialist Workers Party, Democratic Coalition, Popular Alliance, Popular Democratic Party, Convergence and Union Communist Party, Democratic and Socialist Centre, Basque Nationalist Left. |
| Sweden: | Social Democratic Labour Party, Communist Left Party, Centre Party, Liberal Party, Moderate Party. |
| Switzerland: | Christian Democratic People's Party of Switzerland, Independence Alliances, Radical Democratic Party of Switzerland, Social Democratic Party of Switzerland, Swiss People's Party. |
| Syria: | Ba'ath Arab Socialist Party. |
| Turkey: | Republican People's Party, Justice Party, National Salvation Party, Turkish Socialist Workers' Party, Motherland Party, National Democratic Party, Social Democratic Party. |
| United Kingdom: | Conservation and Unionist Party, Labour Party, Liberal Party, Social and Liberal Democrats, Social Democratic Party. |
| USA: | Democratic , Republican. |

## List of a few World Popular Leaders and Political Parties (Commonly asked in exams).

### Sadam Hussein:

Sadam Hussein was the President of Iraq from 16 July 1979 until 9 April 2003. He was an eminent player in the 1968 coup (also known as 17 July Revolution). He was accused of possessing Weapons of Mass Destruction by te western powers (US and UK mainly) in 2003 as a result a coalition led by the US invaded Iraq. Sadam was captured on 13 December 2003 and later convicted of crimes against humanity on 5 November 2006 by Iraqi Courts. He was hanged on 30 December 2006.

## Muhammad Morsi:

Muhamad Morsi was Egyption President from 30 June 2012 to 3 July 2013, he led the Freedom and Justice Party in Egypt and was an affiliate of Muslim Brotherhood. He was ousted by General Fattah el- Sisi after the June protest. Morsi came into power after the resignation of the then Egyption President Hosni Mubarak who resigned after the popular Egyption Revolution 2011. Morsi was the first democratically elected President of Egypt. Morsi was convicted of unlawful detention in April 2015. He died on 17 June 2019 by collapsing during a court hearing on espionage charges.

## Bashar Al Assad:

Bashaar has been President of Syria since 17 July 2000. He has been accused of war crimes during Syrian civil war as well as for possessing and using chemical weapons as accused by the US.

## Nelson Mandela:

Nelson Mandela served as the first black President of South Africa from 1994-1999. He served as the head of the African National Congress from 1991-1997. He died on 5 December 2013 due to respiratory infection. He led the Anti-Apartheid Movement. He served 27 years in prison, arrested and imprisoned in 1962. He was prisoned in Robben Island, Pollsmoor Prison and Victor Verster Prison but for most of the time he stayed in Robben Island.

## Idi Amin:

Idi Amin Dada Oumee ("Butcher of Uganda") - he was the President of Uganda (1971 - 1979) and exiled during the Uganda-Tanzania war. Initially he sought refuge in Libya but later moved on to Saudi Arabia. He died in Saudi Arabia on 16th August, 2003.

## List of few Impeached World Leaders

| Name | Country |
|---|---|
| Donald Trump | United States |
| Martín Vizcarra | Peru |
| Park Geun-hye | South Korea |
| Dilma Rousseff | Brazil |
| Abdurrahman Wahid | Indonesia |
| Boris Yeltsin | Russia |

## Commonly Asked Political Parties:

| Political Party | Head of Party | Country |
|---|---|---|
| Hammas | Ismail Haniyeh | Palestine |
| Justice and Development Party | Tayyip Erdogan | Turkey |
| Republicans | Ronna McDaniel | USA |
| Fatah | Farouk Kadoumi | Palestine |
| Conservative Party | Boris Johnson | UK |
| Labour Party | Jeremy Corbyn | UK |
| Kurdistan Democratic Party | Masoud Barzani | Iraq |
| Islamic Dawa Party | Nouri al-Maliki | Iraq |
| Liberal Democratic Party | Shinzo Abe | Japan |

# INFORMATION ON COUNTRIES

## Country Size by Population:

| | |
|---|---|
| 1. China | 2. India |
| 3. USA | 4. Indonesia |
| 5. Pakistan | 6. Brazil |
| 7. Nigeria | 8. Bangladesh |
| 9. Russia | 10. Mexico |

## Country Size by Area:

| | |
|---|---|
| 1. Russia | 2. Canada |
| 3. USA | 4. China |
| 5. Brazil | 6. Australia |

## Countries by Muslim Population:

| | |
|---|---|
| 1. Indonesia | 2. Pakistan |
| 3. India | 4. Bangladesh |
| 5. Nigeria | 6. Egypt |
| 7. Iran | 8. Turkey |
| 9. Algeria | 10. Sudan |

The smallest Islamic country is Maldives

## Important Minerals and their Primary Producers

| | |
|---|---|
| Aluminium | USA, Russia |
| Bauxite | Australia, Jamaica |
| Chromium | Indonesia, India |
| Coal | USA, Russia |
| Copper | USA, Russia |
| Crude Oil | Russia, Saudi Arabia |
| Diamonds | Zaire, Russia |
| Gold | South Africa, Canada |
| Graphite | Sri Lanka |
| Iron ore | East Germany, Russia |
| Mercury | Italy, Spain |
| Mica | India |
| Natural gas | USA, Russia |
| Phosphate | USA, China |
| Silver | Canada, Russia |
| Sulphur | Italy, Japan |
| Uranium | USA, Canada |

## Top Five Gold Producing Countries

| Country | Tons |
|---|---|
| China | 383.2 |
| Russian Federation | 329.5 |
| Australia | 325.1 |
| United States | 200.2 |
| Canada | 182.9 |

## Top Five Fish Catching Countries

| Country | Amount |
|---|---|
| China | 11.5 million tons |
| Peru | 8.26 million tons |
| Chile | 4.89 million tons |
| Japan | 3.96 million tons |
| Russia | 3.47 million tons |

## Countries with the biggest natural gas reserves

| Country | Resource |
|---|---|
| Russia | 38 trillion cubic metres |
| Iran | 32 trillion cubic metres |
| Qatar | 24.7 trillion cubic metres |
| Turkmenistan | 19.5 trillion cubic metres |
| United States | 12.9 trillion cubic metres |

## Nick Names of the Various Countries and Cities

| Sobriquets | Primary names |
|---|---|
| Britain of South | New Zealand |
| Buffer State of Asia | Afghanistan |
| Bengal's Sorrow | Damodar River |
| Blue Mountains | Nilgiri Hills |
| Cockpit of Europe | Belgium |
| Crossroads of Western Europe | Belgium |
| Dark Continent | Africa |
| Emerald Island | Ireland |
| Flower Garden of Europe | Netherlands |
| Gate of Tears | Strait of Bab-el-mandeb |
| George Cross Island | Malta |
| Gift of Nile | Egypt |
| Great Britain of the Pacific | Japan |
| Hearing Pond | Atlantic Ocean |
| Hermit Kingdom | Korea |
| Homeland of a Viking Empire | Denmark |
| Island Continent | Australia |
| Island of Hispaniola | Haiti |
| Holy Land | Palestine |
| Horn of Africa | Somalia |
| Island of Cloves | Zanzibar |
| Isle of June | Bahamas |
| Isle of Pearls | Bahrain |
| Key to the Mediterranean | Gibraltar |
| Land Gate of the Country | Belarus |
| Land of Cakes | Scotland |
| Land of Contrasts | Colombia |
| Land of Druk Yul | Nepal |
| Land of Free People | Thailand |
| Land of Amber | Lithuania |
| Land of Dukes | Holland |
| Land of Fertile Fields | Algeria |
| Land of Golden Fleece | Australia |
| Land of Golden Fibre | Bangladesh |
| Land of Kangaroo | Australia |
| Land of Lilies | Canada |
| Land of Maple Leaf | Canada |
| Land of the Long White Cloud | New Zealand |
| Land of Midnight Sun | Norway |
| Land of Milk and Honey | Lebanon |
| Land of Morning Calm | Korea |
| Land of Mighty Rivers | Nigeria |
| Land of Mountains | Belize/Nepal |
| Land Of Golden Pagoda | Myanmar |
| Land of Queen of Sheba | Ethiopia |
| Land of Rice and Teak | Myanmar |
| Land of Rising Sun | Japan |
| Land of Thousands Island | Indonesia |
| Land of Thousand Lakes | Finland |
| Land of Pure People | Pakistan |
| Land of South Slaves | Yugoslavia |
| Land of White Elephants | Thailand |
| Land of WindMills | Holland |
| Land of Rabbits | Spain |
| Light of Nile | Egypt |
| Loneliest Island | Tristan-de-gunha |
| Mistress of Sea | England |
| Nation of Shakespeare | England |
| Never Never Land | Prairies of N. Australia |
| Pearl of Antilles | Cuba |
| Pillars of Hercules | Gibraltar (Strait) |
| Playground of Europe | Switzerland |
| Roof of the World | The Pamirs |
| Remnant of a Mighty Empire | Austria |
| Sorrow of China | Hwang Ho |
| Switzerland of Africa | Swaziland |
| Site of Ancient Civilization | Iraq |
| Sugar Bowl of the World | Cuba |
| The Herring Pond | Atlantic Ocean |
| Whitman's Grave | Sierra Leone |
| Workshop of World | England |
| Brasilia of Pakistan | Islamabad (Pakistan) |
| Bride of the Sea | Venice (Italy) |
| Capital of Cooperation | Brussels (Belgium) |
| Crescent City | Rome (Italy) |
| City of Angels | Bangkok (Thailand) |
| City of Bazaars | Cairo (Egypt) |
| City of Brotherly Love | Philadelphia |
| City of Colleges | Lahore (Pakistan) |
| City of Conferences | Geneva (Switzerland) |
| City of Cosmonauts | Moscow (Russia) |
| City of Dreaming Spires | Oxford (UK) |
| City of Eternal Spring | Quite |
| City of Gondolas | Venice |
| City of Ghosts and Temples | Benaras (India) |
| City of Golden Gate | San Francisco |
| City of Golden Temple | Amritsar |
| City of Mosques | Dhaka (Bangladesh) |
| City of Parks | Kiev (Ukraine) |
| City of the Pool Nectar | Amritsar (India) |
| City of Palaces | Calcutta (India) |
| City of Popes | Rome (Italy) |
| City of Rams | Guangzhou (China) |
| City of Roses and Nightingale | Shiraz (Iran) |
| City of Silent Thoroughfares | Venice (Italy) |
| City of Skyscrapers | New York (USA) |
| City of Solution | Brasilia |

| | |
|---|---|
| City of Space Flights | Cape Kennedy |
| City of Peace | Baghdad (Iraq) |
| City of Seven Hills | Rome (Italy) |
| Daughter of Baltic sea | Helsinki |
| Eternal city | Rome (Italy) |
| Forbidden city | Lhasa (China) |
| Garden of India | Banglore |
| Gateway to the East | Beirut (Lebanon) |
| Gateway to the Gulf | Abu Dhabi |
| Gateway of India | Mombay |
| Garden city | Sofia (Bulgaria) |
| Gateway of Pakistan | Karachi |
| Gay city | London (UK) |
| Granite city | Aberdeen |
| Home of the Latins | Rome (Italy) |
| Key to the Common Market | Antwerp |
| Little Pakistan | Bradford (UK) |
| Manchester of Pakistan | Faisalabad |
| Northomption of India | Agra |
| Pyramid city | Cairo |
| Quaker city | Philadelphia (USA) |
| Queen of Adriatic | Venice (Italy) |
| Queen of the Baltic | Stockholm (Sweden) |
| Queen of the East | Chittagong |
| Rome of India | Delhi |
| Rose Pink city | Jaipur ((India) |
| Silver city | Algiers |
| The Granite City | Aberdeen (Scotland) |
| The Great White Way | Broadway (New York) |
| Venice of the East | Cochin |
| Venice of the North | Stockholm |
| White city | Belgrade (Yugoslavia) |
| Wilderness of Bamboo and Paper | Tokyo (Japan) |
| Windy city | Chicago (USA) |
| Abyssinia | Ethiopia |
| Angora | Ankara |
| Batavia | Jakarta |
| British Honduras | Belize |
| Bechuanaland | Botswana |

| | |
|---|---|
| Japan | Land of the Rising Sun |
| Thailand | Land of White Elephants |
| Palestine | Land of Prophets |
| Scotland | Land of Cakes |
| Finland | Land of Thousand Lakes |
| Norway | Land of the Midnight Sun |
| Bhutan | Land of Thunderbolts |
| Canada | Land of Lilies |
| America | Land of Opportunities |
| Chile | Land of Poets |
| Sri Lanka | India's Teardrop |
| Mongolia | Land of Blue Sky |
| Indonesia | The Emerald of the Equator |

| | |
|---|---|
| Philippines | The Pearl of the Orient Seas |
| North Korea | Hermit Kingdom |
| Iceland | The Land of fire and ice |
| England | The Land of Hope and Glory |
| Venezuela | Land of Grace |
| Brazil | Land of Palms |
| Lebanon | Switzerland of Middle East |
| Australia | Land Down Under |
| New Zealand | Land of the Long White Cloud |
| Rwanda | Land of Thousand Hill |
| Egypt | The Gift of Nile |
| Madagascar | The Red Island |
| Ukraine | The Breadbasket of Europe |
| Paris | The City of Love |
| New York | The Big Apple |
| Chicago | Windy City |
| Vancouver | The Big Smoke |
| Los Angeles | The City of Angels |
| Detroit | Motor City |
| Rome | The Eternal City |
| Seattle | The Emerald City |
| Barcelona | The City of Counts |
| Toronto | Queen City |
| Dublin | The Fair City |
| Jerusalem | The Holy City |
| Moscow | The White House |
| Geneva | The Peace Capital |
| Mumbai | The City of Dreams |
| Singapore | The Lion City |
| Cairo | Paris of the Nile |
| Sydney | The Harbour City |
| Berlin | The Grey City |
| Jaipur | The Pink City |
| Lahore | City of Gardens |
| Oslo | Tiger Town |
| Warsaw | Default City |
| St Petersburg | The Mind of Russia |
| Dallas | Big D |
| Munich | World City with Heart |
| The Hague | City of Peace and Justice |
| Beijing | The Forbidden City |
| Tel Aviv | The City that Never Stops |
| Zurich | Little Big City |
| Tehran | The City of 72 Nation |
| Islamabad | The Green City |
| Multan | City of Saints |

## Old and New Names of Countries

| Old | New | Old | New |
|---|---|---|---|
| Abyssinia | Ethiopia | Kampuchea | Cambodia |
| British Guiana | Guyana | Malaya | Malaysia |
| Burma | Myanmar | Mesopotamia | Iraq |
| Ceylon | Sri Lanka | Nippon | Japan |
| Congo | Zaire | Northern Rhodesia | Zambia |
| Dahomey | Benin | Persia | Iran |

| | | | |
|---|---|---|---|
| Dutch East Indies | Indonesia | Siam | Thailand |
| Formosa | Taiwan | South West Africa | Namibia |
| Gold Coast | Ghana | Southern Rhodesia | Zimbabwe |
| Holland | Netherlands | The New Hebrides | Vanuatu |
| Zanzibar | Tanzania | Siam | Thailand |

## World Cities with Old Names

| Old Name of City/State/Country | New Name of City/State/Country |
|---|---|
| Angora | Ankara |
| Astano | Almaty |
| Bangalore | Bengaluru |
| Batavia | Jakarta |
| Bechuanaland | Botswana |
| Bombay | Mumbai |
| Calcutta | Kolkata |
| Cape Canaveral | Cape Kennedy |
| Central Province | Madhya Pradesh |
| Ceylon | Sri Lanka |
| Christina | Oslo |
| Lyallpur | Faisalabad |
| Constantinople | Istanbul |
| Dacca | Dhaka |
| Dahomey | Benin |
| Madras | Chennai |
| Persia | Iran |
| Peking | Beijing |
| Petrograd | Leningrad |
| Poona | Pune |
| Rangoon | Yangon |
| Saigon | Ho Chi Minh City |
| Salisbury | Harare |
| Sandwich Island | Hawaiian Islands |
| Simla | Shimla |

## Change in Name of Countries

| Old Name | New Name |
|---|---|
| Burma | Myanmar |
| Cape Canaveral | Cape Kennedy |
| Ceylon | Sri Lanka |
| Dahomey | Benin |
| Duthc East Indies | Indonesia |
| Dutch Guiana | Surinam |
| East Pakistan | Bangladesh |
| Egypt | United Arab Republic |
| Formosa | Taiwan |
| French Guinea | Guinea |
| French West Africa | Mali |
| Gold Coast | Ghana |
| Greenland | Kalaallit Nunaat |
| Holland | Netherlands |
| Kampuchea | Cambodia |
| Madagascar | Malagasy |
| Malaya | Malaysia |
| Mesopotamia | Iraq |
| Northern Rhodesia | Zambia |
| Nyasaland | Malawi |
| Peking | Beijing |
| Persia | Iran |
| Portuguese Guinea | Guinea Bissau |
| Petrograd | Leningrad |
| Rangoon | Yangon |
| Sandwich Islands | Hawaiian Islands |
| Siam | Thailand |
| Southern Rhodesia | Zimbabwe |
| South West Africa | Namibia |
| Tanganyika and Zanzibar | Tanzania |
| Trucial Oman | United Arab Emirates |
| West French Africa | Mauritania |
| Zaire | Congo-Kinshasa |
| Formosa | Taiwan* |
| Fort Sandman | Zhob |

## Famous Cities of the World

| City | Country |
|---|---|
| Amsterdam | Netherlands |
| Ankara | Turkey |
| Athens | Greece |
| Atlantic City | USA |
| Baltimore | USA |
| Bangkok | Thailand |
| Beijing | China |
| Berne | Switzerland |
| Buenos Aires | Argentina |
| Canberra | Australia |
| Dublin | Ireland |
| Fez | Morocco |
| Ha Noi | Vietnam |
| Kathmandu | Nepal |
| Manila | Philippines |
| Nazareth | Israel |
| Quito | Ecuador |
| Taipei | Taiwan |
| Osaka | Japan |
| Carthage | Tunisia |
| Rangoon | Burman |
| Delhi | India |
| Mumbai | India |

## CITIES ON THE BANKS OF RIVERS

### African Cities on the Banks of Rivers

| City | River | Country |
|---|---|---|
| Addis Ababa | Awash | Ethiopia |
| Cairo | Nile | Egypt |
| Cape Town | Black River | South Africa |
| Casablanca | Oum Er-Rbia | Morocco |
| Durban | Umgeni | South Africa |
| Giza | Nile | Egypt |
| Gondokoro | Nile | South Sudan |

| | | |
|---|---|---|
| Khartoum | Nile | Sudan |
| Nairobi | Nairobi river | Kenya |
| Rabat | Bou Regreg | Morocco |
| Luxor | Nile | Egypt |

## South/North American Cities on the Banks of Rivers

| City | River | Country |
|---|---|---|
| Boston | Charles | USA |
| Buenos Aires | Salado | Argentina |
| Chicago | Mississippi | USA |
| Dallas | Trinity | USA |
| Denver | South Platte river | USA |
| Houston | Oaks | USA |
| Iquitos | Amazon | Peru |
| Leticia | Amazon | Columbia |
| Los Angeles | Los Angeles river | USA |
| Macapa | Ottawa river | Canada |
| New York | Hudson | USA |
| Philadelphia | Delaware | USA |
| Rio de Janeiro | Guandu | Brazil |
| San Francisco | San Francisco river | USA |
| Toronto | Humber,Rouge | Canada |
| Washington | Potomac | USA |

## European Cities on the Banks of Rivers

| City | River | Country |
|---|---|---|
| Amsterdam | Amstel | Netherland |
| Belgrade | Danube | Yugoslavia |
| Berlin | Spree | Germany |
| Bonn | Rhine | Germany |
| Bristol | Avon | UK |
| Budapest | Danube | Hungary |
| Cologne | Rhine | Germany |
| Dublin | Liffey | Ireland |
| Glasgow | Clyde | Scotland |
| Hamburg | Elbe | Germany |
| Leningrad | Neva | Russia |
| Lisbon | Tagus | Portugal |
| Moscow | Moskva | Russia |
| Paris | Seine | France |
| Rome | Tiber | Italy |
| Rotterdam | Nieuwe | Netherlands |
| Vienna | Danube | Austria |
| Warsaw | Vistula | Poland |

## Asian/Oceanic Cities on the Banks of Rivers

| City | River | Country |
|---|---|---|
| Adelaide | Torrens | Australia |
| Baghdad | Tigris | Iraq |
| Bali | Ayung | Indonesia |
| Bangkok | Menam | Thailand |
| Beijing | Yonding, Juma | China |
| Beirut | Beirut River | Lebanon |
| Brisbane | Brisbane River | Australia |
| Damascus | Barada | Syria |
| Delhi | Yamuna | India |
| Dongguan | Pearl | China |
| Guangzhou | Canton | China |
| Hong Kong | Pearl | China |
| Jakarta | Ciliwung | Indonesia |
| Kabul | Kabul river | Afghanistan |
| Karachi | Indus | Pakistan |
| Kathmandu | Bagmati | Nepal |
| Kuala Lumpur | Klang | Malaysia |
| Melbourne | Yarra | Australia |
| Mosul | Tigris | Iraq |
| Osaka | Kyu-yodo | Japan |
| Rangoon | Irwadi | Burma |
| Singapore | Huangpu | Singapore |
| Taipei | Tamsui | Taiwan |
| Tashkent | Chirchiq | Uzbekistan |
| Tehran | Karaj | Iran |
| Tokyo | Sumida | Japan |
| Ulan Bator | Tuur | Mongolia |
| Wuhan | Yangtze | China |
| Yokohama | Ooka | Japan |

## States of UAE:

A. Dubai
B. Abu Dahbi
C. Ras al Khaimah
D. Fujairah
E. Sharjah
F. Umm al Quwain
G. Ajman

## Short List of Facts Related Flags and National Emblems

| Country | Emblem |
|---|---|
| Australia | Kangaroo |
| Bangladesh | Water Lily |
| Barbados | Head of a Trident |
| Belgium | Lion |
| Canada | White Lily |
| Chile | Candor and Huemul |
| Denmark | Beach |
| Dominica | Sisserou Parrot |
| France | Lily |
| Germany | Cornflower |
| Guyana | Canje Pheasant |
| Hong Kong | Bauhinia (Orchid Tree) |
| India | The Lion Capital of Ashoka |
| Iran | Rose |
| Ireland | Shamrock |
| Israel | Candelabrum |
| Italy | White Lily |
| Ivory Coast | Elephant |
| Japan | Chrysanthemum |
| Lebanon | Cedar Tree |
| Luxembourg | Lion with Crown |
| Mongolia | The Soyombo |
| Netherlands | Lion |
| New Zealand | Southern Cross, Kiwi, Fern |

| | | |
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| Khartoum | Nile | Sudan |
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| Leningrad | Neva | Russia |
| Lisbon | Tagus | Portugal |
| Moscow | Moskva | Russia |
| Paris | Seine | France |
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| Rangoon | Irwadi | Burma |
| Singapore | Huangpu | Singapore |
| Taipei | Tamsui | Taiwan |
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| France | Lily |
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| Guyana | Canje Pheasant |
| Hong Kong | Bauhinia (Orchid Tree) |
| India | The Lion Capital of Ashoka |
| Iran | Rose |
| Ireland | Shamrock |
| Israel | Candelabrum |
| Italy | White Lily |
| Ivory Coast | Elephant |
| Japan | Chrysanthemum |
| Lebanon | Cedar Tree |
| Luxembourg | Lion with Crown |
| Mongolia | The Soyombo |
| Netherlands | Lion |
| New Zealand | Southern Cross, Kiwi, Fern |

| | | |
|---|---|---|
| Khartoum | Nile | Sudan |
| Nairobi | Nairobi river | Kenya |
| Rabat | Bou Regreg | Morocco |
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| Taipei | Tamsui | Taiwan |
| Tashkent | Chirchiq | Uzbekistan |
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| Osaka | Kyu-yodo | Japan |
| Rangoon | Irwadi | Burma |
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| Iran | Rose |
| Ireland | Shamrock |
| Israel | Candelabrum |
| Italy | White Lily |
| Ivory Coast | Elephant |
| Japan | Chrysanthemum |
| Lebanon | Cedar Tree |
| Luxembourg | Lion with Crown |
| Mongolia | The Soyombo |
| Netherlands | Lion |
| New Zealand | Southern Cross, Kiwi, Fern |

| | |
|---|---|
| Norway | Lion |
| Pakistan | Crescent |
| Papua New Guinea | Bird of paradise |
| Senegal | Baobab Tree |
| Sierra Leone | Lion |
| Spain | Eagle |
| Sri Lanka | Lion |

| | |
|---|---|
| Sudan | Secretary Bird |
| Syria | Eagle |
| Turkey | Crescent & Star |
| U.K. | Rose |
| U.S.A. | GoldenRod |

## List of Largest Countries by Population

| # | Country | Population (2023) |
|---|---|---|
| 1 | India | 1,431,573,324 |
| 2 | China | 1,425,560,119 |
| 3 | United States | 340,406,177 |
| 4 | Indonesia | 278,043,698 |
| 5 | Pakistan | 241,544,334 |
| 6 | Nigeria | 225,001,092 |
| 7 | Brazil | 216,696,162 |
| 8 | Bangladesh | 173,347,235 |
| 9 | Russia | 144,334,186 |
| 10 | Mexico | 128,665,629 |

**Some facts from 2023 census:**

- Pakistan's population has increased to 241.49 million with an annual growth rate of 2.55%, up by 8.1% from the 2017 census, or by 17.2 million people, according to the census results.
- The rural population is 61.18 percent of the total population in Pakistan while the urban population is 38.82 percent.
- According to the final approved results, the total population of Punjab was recorded at 127.68 million as the population growth rate of the province was 2.53 %.
- The population of Sindh is 55.69 million with a growth rate of 2.57 %.
- The total population of Balochistan is 14.89 million with a growth rate of 3.2%, whereas the total population of Khyber Pakhtunkhwa is 40.85 million with a growth rate of 2.38%.
- According to the final approved results of the 7th Population and Housing Census, the total population of Islamabad is 2.36 million with a growth rate of 2.81%.
- The rural population of the country is 61.18% while the urban population is 38.82%, he said, adding that 84.99% of KP population is rural and 15.01% is urban.
- 59.30% of Punjab population is rural and 40.70% is urban, 46.27% of Sindh population is rural and 53.7% is urban, 69.04% of Balochistan population is rural and 30.96% is urban, 53.10% of Islamabad population is rural and 46.90% is urban.
- The 7th Population and Housing Census is the first ever Digital Census in the history of Pakistan and is the largest digitization project of South Asia.

## COUNTRIES THAT MOVED THEIR CAPITALS:

| Country Name | Old name | New Name |
|---|---|---|
| Nigeria | Lagos | Abuja |
| Myanmar | Yangon | Naypyidaw |
| Russia | St Petersburg | Moscow |
| Pakistan | Karachi | Islamabad |
| Brazil | Rio de Janeiro | Brasilia |
| Kazakhastan | Almaty | Astana |
| Tanzania | Dar es Salaam | Dodoma |
| Ivory Coast | Abidjan | Yamoussoukro |

## List of Largest Countries by Area

| Sr | Country | Tot. Area (Km²) | Tot. Area (mi²) | Land Area (Km²) | Land Area (mi²) |
|---|---|---|---|---|---|
| 1 | Russia | 17,098,242 | 6,601,665 | 16,376,870 | 6,323,142 |
| 2 | Canada | 9,984,670 | 3,855,101 | 9,093,510 | 3,511,022 |
| 3 | China | 9,706,961 | 3,747,877 | 9,388,211 | 3,624,807 |
| 4 | United States | 9,372,610 | 3,618,783 | 9,147,420 | 3,531,837 |
| 5 | Brazil | 8,515,767 | 3,287,955 | 8,358,140 | 3,227,096 |
| 6 | Australia | 7,692,024 | 2,969,906 | 7,682,300 | 2,966,151 |

| | | | | | |
|---|---|---|---|---|---|
| 7 | India | 3,287,590 | 1,269,345 | 2,973,190 | 1,147,955 |
| 8 | Argentina | 2,780,400 | 1,073,518 | 2,736,690 | 1,056,641 |
| 9 | Kazakhstan | 2,724,900 | 1,052,089 | 2,699,700 | 1,042,360 |
| 10 | Algeria | 2,381,741 | 919,595 | 2,381,740 | 919,595 |

## Countries/Cities by Population

### Top 8 Countries by Population:

| | | | |
|---|---|---|---|
| 1. | India | 2. | China |
| 3. | USA | 4. | Indonesia |
| 5. | Pakistan | 6. | Nigeria |
| 7. | Brazil | 8. | Bangladesh |

### The Most Populous Cities of the World

| City | Country | Population |
|---|---|---|
| Tokyo | Japan | 37,393,000 |
| Delhi | India | 30,291,000 |
| Shanghai | China | 27,058,000 |
| Sao Paulo | Brazil | 22,043,000 |
| Mexico City | Mexico | 21,782,000 |
| Dhaka | Bangladesh | 21,006,000 |
| Cairo | Egypt | 20,901,000 |
| Beijing | China | 20,463,000 |
| Mumbai | India | 20,411,000 |
| Osaka | Japan | 19,165,000 |
| New York City | United States | 18,804,000 |
| Karachi | Pakistan | 16,094,000 |
| Chongqing | China | 15,872,000 |
| Istanbul | Turkey | 15,190,000 |
| Buenos Aires | Argentina | 15,154,000 |
| Calcutta | India | 14,850,000 |
| Lagos | Nigeria | 14,368,000 |
| Kinshasa | Democratic Republic of Congo | 14,342,000 |
| Manila | Philippines | 13,923,000 |
| Tianjin | China | 13,580,000 |

### Facts about South Asian population

- The current population of South Asia is 1,956,178,121.
- South Asia makes up for 24.89% of the total world population
- The median age of South Asian population is 27.6 years

## Military Operations in the Near Past

| Operation Name | Country in which operation is conducted |
|---|---|
| Operation Enduring Freedom | Afghanistan |
| Freedom Sentinel | Afghanistan |
| Resolute Support | Afghanistan |
| Chammal | Syria |
| Timber Sycamore | Syria |
| Olive Branch | Syria |
| Operation Shader | Syria |
| Iraqi Freedom | Iraq |
| Inherent Resolute | Iraq & Syria |
| Neptune Spear | Pakistan |

## Highest Military Awards of Countries

| Highest Military Award | Country |
|---|---|
| Medal of Honor | USA |
| Legion d'honneur | France |
| Hero of Russian federation | Russia |
| Victoria Cross | UK |
| Order of August First | China |
| The Valour Cross | Denmark |
| Param Vir chakra | India |
| Military William Order | Netherland |
| Order of Rama | Thailand |
| The Cross of Honor for Valor | Germany |
| Order of Bravery | Bulgaria |
| Bir Srestho | Bangladesh |
| The Cross of Liberty | Estonia |
| Mannerheim Cross of Liberty | Finland |
| Order of Military Merit | Brazil |
| Nishan-e-Haider | Pakistan |

- Druzhba-III is a joint military training exercise between Pakistan and Russia.
- The Dokhlam Standoff was a famous military standoff between China and Bhutan that lasted between June 16-August 28, 2017.

## Armies of Some Countries in the World

List below includes those army names which are commonly asked in exams.

| Country | Army |
|---|---|
| Afghanistan | Afghan National Army |
| Albania | Albanian Land Force |
| Algeria | Algerian People's National Army |
| Belgium | Belgian Land Component |
| Colombia | Colombian National Army |
| Gabon | Gabon Army |
| Gambia | Gambian National Army |
| Japan | Japan Ground Self-Defense Force |
| Jordan | Royal Jordanian Army |
| Kazakhstan | Kazakh Ground Forces |
| North Korea | Korean People's Army Ground Force |
| South Korea | Republic of Korea Army |
| Turkey | Turkish Land Forces |
| Turkmenistan | Turkmen Ground Forces |
| Uganda | Uganda Army |

## Medals of Bravery for Different Countries

| Medal for Bravery | Country |
|---|---|
| National bravery Award | India |
| Military Medal | Britain |
| Distinguished Conduct Medal | Britain |
| Gold Medal of Military Valour | Italy |
| Medal of Bravery | Hungary |
| Queen's Gallantry Medal | United Kingdom |
| Conspicuous Gallantry Medal | Britain |
| Military Merit Medal | Vietnam |
| Nishan-e-Haider | Pakistan |

### Countries with Nuclear Weapons Capability

Acknowledged Nuclear Weapons Capability: Britain, France, Pakistan, United States, China, India, Russia, and North Korea.
Unacknowledged Nuclear Weapons Capability: Israel.
Seeking Nuclear Weapons Capability: Iran.

### Abandoned Nuclear Weapons Development:

South Africa: Constructed but then voluntarily dismantled 6 uranium bombs.
Belarus, Kazakhstan, Ukraine: When Soviet Union broke up, these former states possessed nuclear warheads that they have since given up.

### North Korea Nuclear Tests numbers

| Years | Tests |
|---|---|
| 2006-2017 | 06 |
| 2006-Oct-9 to 2017-Sep-3 | 06 |

### N-Powers' Arsenal: A snapshot:

A Glance At the world's nuclear weapons states and their stockpiles, based on estimates compiled from different sources:
North Korea: Believed to have enough fissile material for about a half-dozen weapons, but estimates vary widely and are unverifiable.
The United States: More than 5,000 strategic warheads, more than 1,000 operational tactical weapons – meant for the battlefield and less powerful than the strategic arms – and approximately 3,000 reserve and tactical warheads.
Russia: Nearly 5,000 strategic warheads, and approximately 3,500 operational tactical warheads. In addition, it has more than 11,000 strategic and tactical warheads in storage.
France: Approximately 350 strategic warheads.
China: As many as 250 strategic warheads and 150 tactical warheads.
Britain: About 200 strategic warheads.
India: Between 45 and 95 nuclear warheads.
Pakistan: Between 30 and 50 nuclear warheads.
Israel: Refuses to confirm it is a nuclear weapons state but is generally assumed to have up to 200 nuclear warheads.

## Some Important Facts:

- First Islamic flag was given to Hazrat Hamza which was white in colour.
- Tallest flagpole in the world is situated in Jeddah, Saudi Arabia (560 feet tall).
- World's oldest flag which is used in its actual design is that of Denmark. The design was adopted in 1625. It is known as Dannebrog.
- Soviet Union flag was a two-sided flag.
- Bhutan's flag has a dragon on it.
- The Crescent on Pakistan flag represents Islam and the five pointed star represent five pillars of Islam.
- The UK flag is called the Union Jack. It is said so because it comprises crosses of three countries (England, Scotland, Ireland under one sovereign state).

- The US flag has 50 stars which are representations of the 50 states of the USA. Nickname for the US flag is Old Glory. The US flag also has 13 stripes which represent 13 colonial states which declared independence from Great Britain and became part of the USA.
- Canadian flag bears Maple leaf on it.
- Chinese flag is of red colour. It consists of 4 small and 1 large star. Red is the manifestation of communist revolution, 1 big golden star represents communism whereas 4 small stars manifest four social classes.
- Cambodian flag has a temple on it.
- Red stripes in the Filipino flag are flown in times of war and blue stripes up in times of peace.
- Allah hu Akbar is repeated 22 times on Iranian flag.

# INTERNATIONAL ORGANIZATIONS

## United Nations Organization

The United Nations is an intergovernmental organization founded on 24 October 1945. The United Nation Charter was signed on 26 June 1945, in San Francisco at the conclusion of the United Nations Conference on International Organizations. The term United Nations was first coined by the then United States President Franklin D. Roosevelt during the Second World War.

## Facts about United Nations

UN has 6 major organs, namely:

- General Assembly (as of August 2019 it has 193 member states): Each year, in September, the full UN membership meets in the General Assembly Hall in New York for the annual General Assembly session.
- Security Council: It has 15 members in total, 5 members are permanent while 10 are non-permanent. Non-permanent members serve a term of 2 years.
- China was admitted in the United Nations Organization in 1971.
- Economic and Social Council: It comprises 54 Members, elected by the General Assembly for a three-year term.
- Trusteeship Council
- International Court of Justice
- Secretariat

## Related Information

- There are 6 official languages of the UN, they are: Arabic, Chinese, English, French, Russian and Spanish.
- The UN Commission on Human Rights was replaced with the UN Human Rights Council in 2006.
- Pakistan has become a non-permanent member of the Security Council for 7 times, most recently in 2012-2013.

## United Nations Observer Status

United Nation Observer Status is provided to international organizations and non UN member states. It allows these entities and non-member states to take part in the work of the UN General Assembly, though their contribution is subject to limitations.

## To Date Two Countries have Observer Status?

- Palestine. Palestine got observer state status on 29 November, 2012 when the UN General Assembly passed resolution 67/19.
- Holy See was granted observer status on 6th April 1964.

## Permanent Members of United Nations Security Council Countries

1. United States
2. Russia (Formerly USSR)
3. United Kingdom
4. France
5. China

*China was the last country to become a permanent member of the Security Council.

The Presidency of the UN Security Council rotates each month among the member States.

The non-permanent members of the Security Council are elected in the following pattern:

- 5 from African and Asian States.
- 1 from Eastern European State.
- 2 from Latin America
- 2 from Western Europe and other states.

## List of Secretary Generals of UN

- **António Guterres (Portuguese)**
  Took Office: 2017
- **Ban Ki-moon (Korea)**
  Term of Office: 2007-2016
- **Kofi Annan (Ghana)**
  Term of Office: 1997-2006
- **Boutros Boutros-Ghali (Egypt)**
  Term of Office: 1992-1996
- **Javier Perez de Cuellar (Peru)**
  Term of Office: 1982-1991
- **Kurt Waldheim (Austria)**
  Term of Office: 1972-1981
- **U Thant (Myanmar)**
  Term of Office: 1961-1971
- **Dag Hammarskjöld (Sweden)**
  Term of Office: 1953-1961
- **Trygve Lie (Norway)**
  Term of Office: 1946-1952

**Gladwyn Jeb (UK)** served as acting Secretary-Secretary-General from October 1945-1 February 1946.

## Structure of the United Nations

| Organ | Total Members |
|---|---|
| General Assembly | 193 |
| Security Council | 15 |
| Economic and Social Council | 54 |
| Trusteeship Council | 5 |
| International Court of Justice | 15 |

| Secretariat | 193 |
|---|---|

## United Nations languages

United Nations has recognized a total of six working languages:

- Arabic
- Chinese
- English
- French
- Russian
- Spanish

## Headquarters of UN Specialized Agencies

| UN Specialized Agency | Headquarters |
|---|---|
| United Nations High Commissioner for Refugees | Geneva, Switzerland |
| Food and Agriculture Organization (FAO) | Rome, Italy |
| International Civil Aviation Organization (ICAO) | Montreal, Quebec, Canada |
| International Fund for Agricultural Development (IFAD) | Rome, Italy |
| International Labor Organization (ILO) | Geneva, Switzerland |
| International Maritime Organization (IMO) | London, United Kingdom |
| International Monetary Fund (IMF) | Washington D.C., United States of America |
| International Telecommunication Union (ITU) | Geneva, Switzerland |
| United Nations Educational, Scientific and Cultural Organization (UNESCO) | Paris, France |
| United Nations Industrial Development Organization (UNIDO) | Vienna, Austria |
| Universal Postal Union (UPU) | Berne, Switzerland |
| World Bank Group (WBG) | Washington D.C., United States of America |
| World Health Organization (WHO) | Geneva, Switzerland |
| World Intellectual Property Organization (WIPO) | Geneva, Switzerland |
| World Meteorological Organization (WMO) | Geneva, Switzerland |
| World Tourism Organization (UNWTO or WTO) | Madrid, Spain |
| World Trade Organization (WTO) | Geneva, Switzerland |
| International Organization for Migration (IOM) | Geneva, Switzerland |
| International Atomic Energy Agency (IAEA) | Vienna, Austria |

# Brief Notes on Some Commonly Questioned International Organizations

## Non-Aligned Movement (NAM)

NAM was established in 1961 in Belgrade, Yugoslavia. The idea of NAM was first discussed during the Asia-Africa conference held in Ban dung, Indonesia (1955). Its main founding members were Josip Tito the then Yugoslav President and Jawaharlal Nehru the then PM of India. First NAM Summit Conference was held in Belgrade, Yugoslavia in September 1961. To date it has 120 member states, 17 observer states and 10 international organizations. Its coordinating bureau is situated in New York, USA and its current chairperson is Nicolas Maduro. Its summits are held after every three years. It was established during the time of the Cold War with the aim of maintaining neutrality by either supporting or going against any world power.

## Non Alignment Movement Summit Conferences

- The Non Alignment Movement is the largest grouping of states worldwide after United Nations
- The Non Alignment Movement was established in 1961
- The purpose of the conference was declared by Fidel Castro in his Havana Declaration of 1979

| Summit | Venue | Year |
|---|---|---|
| 19th | Uganda | End of 2023 |
| 18th | Baku, Azerbaijan | 25-26 October, 2019 |
| 17th | Porlaman | September, 2016 |
| 16th | Tehran, Iran | 26-31 August, 2012 |
| 15th | Sharm-el-Sheikh, Egypt | 15-16 July, 2009 |
| 14th | Havana, Cuba | 11-16 September, 2006 |

## SAARC

SAARC was established on 8 December 1985 in Dhaka, headquartered in Kathmandu, Nepal. It aims to promote socio-economic welfare of the people of South Asia. First SAARC summit was held in Dhaka 6-8 December 1985. Its first Secretary-General was Abul Ahsan (Bangladesh) from 16 January to 1 October 1989 and its current (14th) Secretary-General is Esala Ruwan Weerakoon (Sri Lanka). Currently it has 8 member states. The 19th SAARC summit was scheduled to be held in Pakistan from 15-16 November 2016 but it got cancelled in the aftermath of the Uri attack, India. Maldives is a member state of SAARC with the highest literacy rate.

## Facts about SAARC Summits

| Sr # | Location | Date of Summit |
|---|---|---|
| 1 | Dhaka | 7-8 December, 1985 |
| 2 | Bangalore | 16-17 November, 1986 |
| 3 | Kathmandu | 2-4 November, 1987 |
| 4 | Islamabad | 2-31 December, 1988 |
| 5 | Male' | 21-23 November, 199 |
| 6 | Colombo | 21 December, 1991 |
| 7 | Dhaka | 10-11 April, 1993 |
| 8 | New Delhi | 2-4 May, 1995 |
| 9 | Male' | 12-14 May, 1997 |
| 10 | Colombo | 29-31 July, 1998 |
| 11 | Kathmandu | 4-6 January, 2002 |
| 12 | Islamabad | 2-6 January, 2004 |
| 13 | Dhaka | 12-13 November, 2005 |
| 14 | New Delhi | 3-4 April, 2007 |
| 15 | Colombo | 1-3 August, 2008 |
| 16 | Thimphu | 28-29 April, 2010 |
| 17 | Addu | 10-11 November, 2011 |

| | | |
|---|---|---|
| 18 | Kathmandu | 26-27 November 2014 |
| 19 | Islamabad | 15 to 16 November 2016 (Ccancelled) |

## Facts about Economic Cooperation Organization

- In 1985, the Economic Cooperation Organization (ECO) was established by Iran, Pakistan, and Turkey to promote economic, technical, and cultural cooperation among the member states
- ECO is the successor organization of Regional Cooperation for Development (RCD) which remained in existence since 1964 up to 1979. In 1992, the Organization was expanded to include seven new members, namely: Afghanistan, Azerbaijan, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan
- The transport and communications sector, since the early years of ECO, is on the top of the agenda. Key documents in this field are: the Quetta Plan of Action; the Istanbul Declaration (ECO Long Term Perspectives); the Almaty Outline Plan for the Development of Transport Sector in the ECO region; the Ashgabat Declaration of 1997; the Programme of Action for ECO Decade of Transport and Communications; and the Transit Transport Framework Agreement

## Largest Ambulance Service in the World

Established in 1951, Pakistan has the world's largest ambulance service – (Guinness record) Pakistan's Edhi Foundation, which is also listed in the Guinness Book of World Records, operates the world's largest ambulance network.

## Shanghai Cooperation Organization

Creation of SCO was announced on 15 June 2001 and its charter was formally signed in June 2002 which entered into force on 19 September 2003. Its predecessor organization was Shanghai Five Group which was established on 26 April 1996. Currently it has 9 member states, headquartered in Beijing, China. Its current Secretary General is Zhang Ming. Pakistan became the full-member of SCO on 9 June 2017 at its summit in Astana, Kazakhstan. India is also a member of SCO. Its official languages are Russian and Chinese. SCO is usually referred to as Alliance of the East.

## OPEC

Organization of the Petroleum Exporting Countries is an intergovernmental organization of 13 oil exporting member States, established in September 1960 at Baghdad, headquartered in Vienna, Austria since 1965. At its inception it comprised 5 member nations. OPEC aims to regulate the petroleum prices.

## Member states of OPEC (Organization of the Petroleum Exporting Countries)

| | | |
|---|---|---|
| Algeria | Angola | Congo |
| Equatorial Guinea | Gabon | Iran |
| Iraq | Kuwait | Libya |
| Nigeria | Saudi Arabia | United Arab Emirates |
| Venezuela | | |

## Former member countries of OPEC

| Country | Region | Membership Years |
|---|---|---|
| Ecuador | South America | 1973–1992, 2007–2020 |
| Indonesia | Southeast Asia | 1962–2008, Jan–Nov 2016 |
| Qatar | Middle East | 1961–2019 |

## SEATO

In 1954, the United States, France, Great Britain, New Zealand, Australia, the Philippines, Thailand and Pakistan formed the Southeast Asia Treaty Organization, or SEATO. It was signed in Manila. The purpose of the organization was to prevent communism from gaining ground in the region.

## BRICS

BRICS, which stands for Brazil, Russia, India, China and South Africa, is an economic, political and regional cooperation organization, with some of the leading economies of the world. Established in 2009, BRICS has contributed to the economic infrastructure of the world with significant growth and industrialization. This organization is most appreciated for giving birth to a 'South-South' cooperation.

## Facts about G20 Summit

- The G20, short for "Group of 20", is made up of 19 countries: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, South Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom and the United States, plus the European Union.
- Together, members account for roughly 85% of the world economy; that's around three-quarters of global trade and two-thirds of the world's population.
- The G20 started in 1999, following the Asian financial crisis, as a forum for finance ministers and central bank governors from the major developed and emerging economies to discuss global financial issues.
- Amid the global financial crisis in 2008, it grew into the leaders' summit, a place where presidents and prime ministers could get together for two days to try to solve the world's economic problems.

## ASEAN*

The Association of Southeast Asian Nations is an organization that is built on the ground of promoting intergovernmental cooperation, such as economic, political, security, military, educational and sociocultural integration. It has a total of 10 members.

## List of East Asia Summits

| Date | Host Country |
|---|---|
| 14 December 2005 | Malaysia, Kuala Lumpur |
| 15 January 2007 | Philippines, Mandaue |
| 21 November 2007 | Singapore |
| 25 October 2009 | Thailand |
| 30 October 2010 | Vietnam, Hanoi |

| | |
|---|---|
| 18–19 November 2011 | Indonesia, Bali |
| 9–10 October 2013 | Brunei |
| 12–13 November 2014 | Mayanmar |
| 21–22 November 2015 | Malaysia |
| 6–8 September 2016 | Laos |
| 13–14 November 2017 | Philippines |
| 14–15 November 2018 | Singapore |
| 4 November 2019 | Thailand ,Bangkok |
| 14 November 2020 | Vietnam |
| 26-28 Oct 2021 | Brunei |
| 10-13 Nov 2022 | Cambodia |
| 9-11 May 2023 | Labuan Bajo |

## CENTO

The Central Treaty Organization (CENTO), originally known as the Baghdad Pact or the Middle East Treaty Organization (METO), was a military alliance of the Cold War. It was formed in 1955 by Iran, Iraq, Pakistan, Turkey and the United Kingdom and dissolved in 1979.

## OIC

Headquartered in Jeddah, Saudi Arabia.
Organization of Islamic Cooperation
Member states: 57
It's an organization which represents Muslims from across the globe and voices their economic, political and social concerns on an international level. It is the largest inter-governmental body – second only to the United Nations.

**IDA World Bank**

International Development Association financial institution that provides grants and loans to the poorest countries of the world that are in the developing stage.

## Iran Action Task Group (IAG)

It was formed by the United States Secretary of State, Mike Pompeo in order to coordinate and run State policy towards Iran. It was created on August 16, 2018. The formation of this group was prompted after the US pulled out of the Joint Comprehensive Plan of Action (JCPOA) which was the nuclear accord made with Iran on July 14, 2015.

## Financial Action Task Force (FATF)

FATF is an intergovernmental organization which was founded in 1989 by the G7 nations with the goal to combat money laundering and terrorism financing. It is headquartered in Paris, France.

## WIPO Facts (World Intellectual Property Organization)

- WIPO is one of the specialized agencies of United Nations
- WIPO was established to promote and protect intellectual property across the globe through cooperation with countries and international organizations
- WIPO initiated its operations on 26th April, 1970.
- WIPO administers 26 international treaties regarding inteliectual property issues.

## List of Secretaries-General of Arab League

| Name | Nationality | Term |
|---|---|---|
| Abdul Razek Azzam | Egypt | 1945 -1952 |
| Abdul Khlek Hassouna | Egypt | 1952 - 1972 |
| Mahmoud Riyadh | Egypt | 1972 - 1979 |
| Chedi Klibi | Tunisia | 1979 - 1990 |
| Dr. Ahmad Esmat Abd al Meguid | Egypt | 1991 - 2001 |
| Amr Moussa | Egypt | 2001 - 2011 |
| Nabil el-Araby | Egypt | 2011 – 2016 |
| Ahmed Aboul Gheit | Egypt | 2016 - Present |

## International Organizations for Gender Equality

| Name | Year of Establishment |
|---|---|
| United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) | 2010 |
| Association for Women's Rights in Development (AWID) | 1982 |
| Womankind Worldwide | 1989 |
| Center for Reproductive Rights | 1992 |
| Plan International | 1937 |
| Women for Women International | 1993 |
| Equality Now | 1992 |
| Women's Environment and Development Organization | 1990 |
| Men Engage Alliance | 2004 |
| Global Fund for Women | 1987 |
| Rise Up | 2009 |
| MATCH International Women's Fund | 1976 |
| Gender at Work | 2001 |
| European Women's Lobby | 1990 |
| European Institute for Gender Equality | 2006 |
| PROMUNDO | 1997 |
| Gender Equality Resource Center | 2013 |
| Amnesty International | 1961 |
| International Alliance of Women | 1904 |
| Human Right's Watch | 1978 |
| Abaad Center for Gender Equality (Abaad MENA) | 2011 |

## Bread for the World Institute

*Bread for the World is a non-partisan, Christian advocacy organization based in the United States that advocates for policy changes to end hunger. Bread for the World provides resources to help individuals advocate to end hunger, which might include writing personal letters and emails to members of Congress, meeting with their members of Congress, and working in coalition with others.

# INTERNATIONAL ORGANIZATIONS
## (Headquarters & President/General Secretary)

| International Organizations | Headquarters | President/ General Secretary | Purpose |
|---|---|---|---|
| Asian Infrastructure Investment Bank (AIIB) | Beijing, China | JinLiqun | To support infrastructure development in Asia-Pacific region. |
| New Development Bank (BRICS Development Bank) | Shanghai, China | Dilma Rousseff | To help member states, provide financial assistance, and support various projects. |
| Asian Development Bank (ADB) | Manila, Philippines | Masatagu Asakawa | To promote social and economic development in Asia |
| Arab Monetary Fund | Abu Dhabi, UAE | Dr. Abdulrahman A. Al. Hamidy | A regional organization to balance payments and boost regional trade/ |
| International Monetary Fund (IMF) | Washington DC, US | Kristalina Georgieva | To provide short-term capital to troubled states.<br>Helping national governments in managing their exchange rates.<br>Oversee fix Exchange rate arrangement between countries. |
| World Bank | Washington DC, US | Ajay Banga | Provide low interest loans and grants. |
| United Nations Organization (UN) | New York, US | Antonio Guterres | Maintaining world peace and security. |
| United Nations Children's Fund (UNICEF) | New York, US | Catherine M. Russell | Child protection over the globe. |
| United Nations Populations Fund (UNFPA) | New York, US | Dr. Natalia Kanem | To ensure every childbirth is safe, every pregnancy is wanted and every young child reaches potential. |
| United Nations Conference on Trade & Development (UNCTAD) | Geneva, Switzerland | Rebeca Grynspan | Dealing with trade and investment issues. |
| World Health Organization (WHO) | Geneva, Switzerland | Dr. Tedros Adhanom | Dealing with health problems worldwide.<br>Protecting against diseases. |
| World Economic Forum | Colongy, Switzerland | Klaus Schwab | To discuss global issues |
| International Labour Organisation (ILO) | Geneva, Switzerland | Gilbert Houngbo | Monitoring and protecting Labour rights. |
| World Trade Organisation | Geneva, Switzerland | Roberto Ngozi Okonjo | Enhancement and regulation of world trade |
| World Meteorological Organisation | Geneva, Switzerland | Gerhard Adrian | It is involved in international coordination and cooperation on state and earth behavior and its interaction with land and oceans |
| World Intellectual Property Organization | Geneva, Switzerland | Daren Tang | Aim to protect and protect intellectual property rights around the globe. |
| International Committee of the Red Cross | Geneva, Switzerland | Mirjana Spoljaric Egger | Provide humanitarian assistance to the people of war affected nations. |
| United Nations Education Scientific & Cultural Organization (UNESCO) | Paris, France | Audrey Azoulay | To promote peace and stability around the globe through education and cultural harmony. |
| Organization for Economic Cooperation & Development (OECD) | Paris, France | Mathias Cormann | Promote world trade |
| United Nations Industrial Development Organisation (UNIDO) | Vienna, Austria | Gerd Müller | it aims to advance industrialization in developing your efforts by acting as a liaison between these countries and other UN organizations devoted to this purpose. |
| International Atomic Energy Agency | Vienna, Austria | Rafael Mariane Grossi | To help and motivate in research, development and practical application of atomic energy for peaceful uses |
| Organisation of Petroleum Exporting Countries (OPEC) | Vienna, Austria | Haith al Ghais | Regulate oil trade and price. |
| Amnesty International | London, UK | Agnes Callamard | Human rights watchdog. |
| International Maritime Organisation | London, UK | Kitack Lim | To regulate safety of shipping, involved in international trade. |
| Commonwealth of Nations | London, UK | Head: Charles III<br>The Baroness (Secretary General) | To the intuition of World Peace Promotion of representative democracy and individual liberty |
| South Asian Association for Regional Cooperation (SAARC) | Kathmandu, Nepal | Golam Sarwar | To promote economic, social and cultural growth among member states. |

| | | | |
|---|---|---|---|
| Association of SouthEast Nations (ASEAN) | Jakarta, Indonesia | Dr. Kao Kim Hourn | To enhance economic growth, social progress and cultural development in the region through joint efforts. |
| Asia Pacific Economic Cooperation (APEC) | Singapore | Chair-person: Prayut Chan-o-cha | To promote economic growth and prosperity for the region. |
| North Atlantic Treaty Organisation (NATO) | Brussels, Belgium | Jens Stoltenberg (Secretary-General) | Initial purpose was to protect states from communist countries. |
| International Cricket Council (ICC) | Dubai, UAE | Greg Barclay | To regulate International Cricket. |
| Food & Agricultural Organisation (FAO) | Rome, Italy | Qu Dongyu | It aims to fight hunger, poverty and starvation in the world. |
| International Court of Justice | The Hague, Netherlands | Judge Joan E. Donoghue | It has 2 main functions : to settle legal disputes in accordance with international law. To give advice on matters brought to it. |
| International Olympic Committee | Lausanne, Switzerland | Thomas Bach | Promote olympics throughout the world and make the world a better place through sports. |
| The Fédération Internationale de Football Association (FIFA) | Zurich, Switzerland | Gianni Infantino | Responsible for managing and organizing international tournaments. |
| The Organization for the Prohibition of Chemical Weapons (OPCW) | The Hague, The Netherlands | Fernando Arias | To make earth free from chemical weapons. |
| World Wide Fund for Nature (WWF) | Avenue du Mont-Blanc, Gland, Vaud, Switzerland | Adil Najam | Wildlife protection |
| Shanghai Cooperation Organization (SCO) | Beijing, China | Zhang Ming | Promote trade, political relations, economy, science and technology among member states. |

## Mottos of International Organizations

| Organisation | Motto |
|---|---|
| World Bank | Working for a World Free of Poverty |
| Amnesty International | It is better to light a candle than to curse the darkness |
| North Atlantic Treaty Organisation (NATO) | Animus in consulendo liber - A Mind Unfettered in Deliberation |
| Association of South East Nations (ASEAN) | One vision, One Identity, One community |
| International Chamber of Commerce | The World Business Organization |
| Internet Corporation for Assigned Names and Numbers (ICANN) | One world, One Internet |
| World Economic Forum | Committed to improving the state of the world |
| International Union of Pure and Applied Chemistry (IUPAC) | Advancing Chemistry Worldwide |
| Worldwide Fund for Nature | Building a future in which people and nature thrive |
| African Union | A United and Strong Africa |
| International Olympic Committee | Faster, Higher, Stronger (Citius, Altius, Fortius) |
| Federation Internationale de Football Association (FIFA) | For the Game, For the World. |
| World Chess Federation (FIDE) | Gens una sumus; "We are one people" |
| International Hockey Federation (FIH) | FairPlay Friendship Forever |
| International Cricket Council (ICC) | Great Sport, Great Spirit |
| International Basketball Federation (FIBA) | We are basketball |
| International Committee of the Red Cross (ICRC) | Inter Arma Caritas (In War, Charity) |

### Secretaries-General of Commonwealth of Nations - changeable

| Name | Country | Tenure |
|---|---|---|
| Arnold Smith | Canada | 1965-1975 |
| Sir Shridath | Guyana | 1975-1990 |
| Chief Emeka Anyaoku | Nigeria | 1990-2000 |
| Don McKinnon | New Zealand | 2000-2008 |
| Kamalesh Sharma | India | 2008-2016 |
| Patricia Scotland | Britain | 2016-present |

## List of International Trade Organizations and Agreements

| Trade Organization/Agreement | Purpose | Members |
|---|---|---|
| The Export-Import Bank of the United States | The official export credit agency of the United States federal government | 1 |
| The International Monetary Fund (IMF) | To promote international economic cooperation, international trade and exchange rate stability | 190 |
| The North American Free Trade Agreement (NAFTA) | A trilateral trade bloc between Canada, Mexico and the United States | 3 |
| The World Bank | An international financial institution that provides loans to developing countries for various programs | 189 |

| | | |
|---|---|---|
| The European Union | An economic and political Union made up of 27 member states located primarily in Europe | 27 |
| The Asia Pacific Economic Cooperation (APEC) | A forum for 21 Pacific Rim countries that seek to promote free trade and economic opportunities throughout the Asia Pacific region. | 21 |
| The General Agreement on Tariffs and Trade (GATT) | A multilateral agreement regulating international trade | 128 |
| South Asian Association for Regional Cooperation (SAARC) | A body dedicated to economic, technological, social and cultural development collectively. | 8 |
| Association of Southeast Asian Nations (ASEAN) | An economic union to promote intergovernmental cooperation and facilitate economic, political, security, military, educational and sociocultural integration | 10 |

## List of Heads of International Monetary Fund (IMF)

| Name | Country | Tenure |
|---|---|---|
| Kristalina Georgieva | Bulgaria | 2019- present |
| Christine Lagarde | France | 2011-2019 |
| Dominique Strauss-Kahn | France | 2007-2011 |
| Rodrigo de Rato | Spain | 2004-2007 |
| Horst Kohler | Germany | 2000-2004 |
| Michael Camdessus | France | 1987-2000 |
| Jacques de Larosiere | France | 1978-1987 |

## Origin of the Commonwealth

The commonwealth was created in 1926 through the Balfour Declaration of the Imperial Conference where it was recognized that these dominions (semi-independent countries) will be given equal status – it was an association of 8 sovereign independent states which later grew to include more states. First members included:

- United Kingdom,
- Canada,
- Australia,
- New Zealand,
- South Africa,
- Irish Free State,
- India and Newfoundland.

## Organizations in Pakistan

| | |
|---|---|
| CHASNUPP | Chashma Nuclear Power Plant |
| APSMA | All Pakistan Cement Manufacturers Association |
| FBS | Federal Bureau of Statistics |
| NEPRA | National Electric Power Regulation Authority |
| SITE | Sindh Industrial Trading Estate |
| PPHI Sindh | People's Primary Healthcare Initiative |

## Presidents of Financial Action Task Force (FATF)

| | |
|---|---|
| 1989-1991 | Mr. Denis Samuel Lajeunesse, France (First President) |
| 2012 – 2013 | Mr. Bjørn Skogstad Aamo, Norway |
| 2013 – 2014 | Mr. Vladimir Nechaev, The Russian Federation |
| 2014 – 2015 | Mr. Roger Wilkins AO, Australia |
| 2015 – 2016 | Mr. Je-Yoon Shin, Korea |
| 2016 – 2017 | Juan Manuel Vega-Serrano, Spain |
| 2017 – 2018 | Santiago Otamendi, Argentina |
| 2018 – 2019 | Marshall Billingslea, United States |
| 2019 – 2020 | Xianming Liu, China |
| 2020 – 2021 | Dr Marcus Pleyer, Germany |
| 2022-2024 | T-Raja Kumar |

## FATF Member Nations

| | | | |
|---|---|---|---|
| 1. | Argentina | 2. | Australia |
| 3. | Austria | 4. | Belgium |
| 5. | Brazil | 6. | Canada |
| 7. | China`` | 8. | Denmark |
| 9. | European Commission | 10. | Finland |
| 11. | France | 12. | Germany |
| 13. | Greece | 14. | Gulf Cooperation Council |
| 15. | Hong Kong, China | 16. | Iceland |
| 17. | India | 18. | Ireland |
| 19. | Israel | 20. | Italy |
| 21. | Japan | 22. | South Korea |
| 23. | Luxembourg | 24. | Malaysia |
| 25. | Mexico | 26. | Netherlands |
| 27. | New Zealand | 28. | Norway |
| 29. | Portugal | 30. | Russian Federation |
| 31. | Saudi Arabia | 32. | Singapore |
| 33. | South Africa | 34. | Spain |
| 35. | Sweden | 36. | Switzerland |
| 37. | Turkey | 38. | United Kingdom |
| 39. | United States | | |

## World Soft Power Index 30 – Top 5 nations

**2016:** United States, United Kingdom, Germany, Canada, France
**2017:** France, UK, US, Germany, Canada
**2018:** UK, France, Germany, US, Japan
**2019:** France, UK, Germany, Sweden, US
**2020:** US, Germany, UK, Japan, China
**2021**: US, UK, Germany, China, Japan
**2022**: US, UK, Germany, China, Japan
**2023**: US, UK, Germany, Japan, China

## FATF GRAY LIST

| | |
|---|---|
| Albania | Mozambique |
| Barbados | Panama |

| | |
|---|---|
| Burkina Faso | Philippines |
| Cambodia | Senegal |
| Cayman Islands | South Sudan |
| Gibraltar | Syria |
| Haiti | Tanzania |
| Jamaica | Türkiye |
| Jordan | Uganda |
| Mali | United Arab Emirates |
| Morocco | Yemen |
| Democratic Republic of the Congo | Cameroon |
| Croatia | Vietnam |

## Top Ten Happiest Countries in the World:

**World Happiness Index 2023**

| Rank | Country | Happiness |
|---|---|---|
| 1 | Finland | 7.804 |
| 2 | Denmark | 7.586 |
| 3 | Iceland | 7.530 |
| 4 | Israel | 7.473 |
| 5 | Netherlands | 7.403 |
| 6 | Sweden | 7.395 |
| 7 | Norway | 7.315 |
| 8 | Switzerland | 7.240 |
| 9 | Luxembourg | 7.228 |
| 10 | New Zealand | 7.123 |

## Global Competitive Report (2022-2023)

**2022:**

1. Denmark
2. Switzerland
3. Singapore
4. Sweden
5. Hong Kong
6. Netherlands
7. Taiwan, China
8. Finland
9. Norway
10. United States

**2023:**

1. Demark
2. Greland
3. Switzerland
4. Singapore
5. Netherlands
6. Taiwan, China
7. Hong Kong
8. Sweden
9. United States
10. UAE

## List of Global Climate Change Agreements

| Agreement name | Signing year |
|---|---|
| Montreal Protocol | 1987 |
| UN Framework Convention on Climate Change | 1992 |
| Kyoto Protocol | 2005 |
| Paris Agreement | 2015 |

## List of Youth Climate Activists from Around the Globe

| Name | Country |
|---|---|
| Xiye Bastida | USA |
| Kallan Benson | USA |
| Vic Barrett | USA |
| John Paul Jose | India |
| Luisa Neubauer | Germany |
| Isra Hirsi | USA |
| Holly Gillibrand | Scotland |
| David Wicker | Italy |
| Xiuhtezcatl Martinez | USA |
| Lilly Platt | The Netherlands |
| Saoi O'Connor | Ireland |
| Jamie Margolin | USA |
| Leah Namugerwa | Uganda |
| Anuna De Wever | Belgium |
| Jerome Foster II | USA |
| Eyal Weintraub | Argentina |
| Alexandria Villaseñor | USA |
| Haven Coleman | USA |
| Greta Thunberg | Sweden |

## Global Gender Gap Report 2023

Key findings of the report show that no country has yet achieved full gender parity, although the top nine countries — Iceland, Norway, Finland, New Zealand, Sweden, Germany, Nicaragua, Namibia and Lithuania — have closed at least 80 per cent of their gap.

Iceland is the most gender-equal country in the world for the fourteenth consecutive year and the only country to have closed more than 90 per cent of its gender gap.

For the 146 countries covered in the 2023 index, the health and survival gender gap has closed by 96 per cent, the educational attainment gap by 95.2 per cent, the economic participation and opportunity gap by 60.1 per cent, and the political empowerment gap by 22.1 per cent.

According to the current rate of progress over the 2006-2023 span, it will take 162 years to close the political empowerment gender gap, 169 years for the economic participation and opportunity gender gap, and 16 years for the educational attainment gender gap, the report said.

The time to close the health and survival gender gap remains undefined, the report pointed out.

South Asia

Southern Asia has achieved 63.4 per cent gender parity, the second-lowest score of the eight regions. The score has risen by 1.1 percentage points since the last edition based on the constant sample of countries covered since 2006, which can be partially attributed to the rise in scores of populous countries such as India, Pakistan and Bangladesh.

Along with Bhutan, there are other countries in Southern Asia that have seen an improvement of 0.5 percentage points or more in their scores since the last edition.

Bangladesh, Bhutan and Sri Lanka are the best-performing countries in the region, while Pakistan, Iran and Afghanistan are at the bottom of both the regional and global ranking tables. At the current rate of progress, full parity in the region will be achieved in 149 years.

## Global Climate Action Summit

- Held in San Francisco, United States
- Convened by Governor Jerry Brown
- Held between 12th-14th September, 2018
- At the Summit, twenty-nine organizations committed $4 billion to combat climate change over the coming five years.
- The Summit also provided encouragement to governments to implement the guidelines of the Paris Agreement.
- It also guided them to prepare their national climate action plans in the upcoming years.

## Historic Famines of the World

| Famine | Country/City/Province | Year |
|---|---|---|
| Great Famine | Ireland | 1845 |
| Bengal Famine | Bengal | 1943 |
| Soviet Famine | Soviet Union | 1932-33 |
| Irish Famine | Ireland | 1879 |
| Holodomor | Ukraine | 1932-33 |
| Bangladesh Famine | Bangladesh | 1974 |
| North Korean Famine | North Korea | 1994 |
| Chalisa Famine | North India | 1783 |
| Indian Famine | India | 1899-1900 |
| Dutch Famine | Netherlands | 1944-45 |
| Bihat Famine | Bihar | 1873-74 |
| Orissa Famine | Orissa | 1866 |
| Rajputana Famine | Rajputana | 1868 |
| Finnish Famine | Finland | 1867 |
| Great Famine of Estonia | Estonia | 1694 |
| Ethipian Famine | Ethiopia | 1983 |

## Death Anniversaries of Famous Scientists:

| | |
|---|---|
| Stephen Hawking | March 14, 2018 |
| Abdus Salam | November 21, 1996 |
| Albert Einstein | April 18, 1955 |
| Srinivasa Ramanujan | April 26, 1920 |
| Rosalind Franklin | April 16, 1958 |

- Albert Einstein was born in Germany.

## Famous IT companies and their Founders

| Company | Founder(s) |
|---|---|
| Facebook | Mark Zuckerberg |
| Twitter | Jack Dorsey, Noah Glass, Biz Stone, Evan Williams |
| Apple | Steve Jobs, Steve Wozniak, Ronald Wayne |
| Instagram | Facebook, Kevin Systrom and Mike Krieger |
| WhatsApp | Jan Koum, Brian Acton |
| Microsoft | Bill Gates, Paul Allen |
| Alibaba | Jack Ma |
| Amazon | Jeff Bezos |
| Flipkart | Binny Bansal, Sachin Bansal |
| Quora | Adam D'Angelo, Charlie Cheever |
| Oracle | Larry Ellison, Bob Miner and Ed Oates |
| Wikipedia | Jimmy Wales, Larry Sanger |

The first google home delivery drone service was launched in Australia in 2019, after years of test flights.

## Important Newspapers of the World

| Name of Newspaper | Country | City |
|---|---|---|
| The News | Pakistan | Karachi/Lahore |
| Jang | Pakistan | Karachi/Lahore |
| Express | Pakistan | Karachi/Lahore |
| Dawn | Pakistan | Karachi/Lahore |
| Nawa-e-Waqt | Pakistan | Karachi/Lahore |
| Khabrain | Pakistan | Karachi/Lahore |
| Pakistan Today | Pakistan | Lahore |
| Ausaf | Pakistan | Islamabad |
| Mashriq | Pakistan | Peshawar |
| The Express | U.K. | London |
| The Mirror | U.K. | London |
| The Mail | U.K. | London |
| Manchester Guardian | U.K. | London |
| The Sunday Times | U.K. | London |
| The Economist | U.K. | London |
| Daily Express | U.K. | London |
| Sunday Telegraph | U.K. | London |
| Morning Star | U.K. | London |
| Spectator | U.K. | London |
| News Statesman | U.K. | London |
| The Times | U.K. | London |
| Daily Telegraph | U.K. | London |
| The Sun | U.K. | London |
| Observer | U.K. | London |
| Le Monde | France | Paris |
| Le Figaro | France | Paris |
| New York Times | USA | New York |
| Baltimore Sun | USA | Baltimore |
| Washington Post | USA | Washington |
| International Herald Tribune | USA | Washington |
| Washington Evening Star | USA | Washington |

| | | |
|---|---|---|
| Christian Science | USA | Washington |
| Izvestia | (Russian Federation) | Moscow |
| Pravada | (Russian Federation) | Moscow |
| Red Flag | China | Beijing |
| People's Daily | China | Beijing |
| Al Ahram | Egypt | Cairo |
| Akhbar EL Yom | Egypt | Cairo |
| Al Gomhouria | Egypt | Cairo |
| Yediot Aharonot | Israel | Tel Aviv |
| Nhan Dan | Vietnam | Hanoi |
| Asahi Shimbun | Japan | Tokyo |
| The Yomiuri | Japan | Tokyo |
| Suara Karya | Indonesia | Jakarta |
| Straits Times | Singapore | Singapore |
| Eastern Sun | Singapore | Singapore |
| The Malay Mali | Malaysia | Kuala Lumpur |
| Rising Nepal | Nepal | Kathmandu |
| Toronto Star | Canada | Toronto |
| Montreal Star | Canada | Montreal |
| Australian | Australia | Canberra |
| Sydney Morning News | Australia | Sydney |
| Ceylon Daily News | Sri Lanka | Colombo |
| Statesman | Sri Lanka | Colombo |
| Sangbad | Bangladesh | Dhaka |
| Janakantha | Bangladesh | Dhaka |
| Morning News | Bangladesh | Dhaka |
| Banglar Bani | Bangladesh | Dhaka |
| Bangladesh Observer | Bangladesh | Dhaka |
| Bangladesh Times | Bangladesh | Dhaka |
| The Peoples | Bangladesh | Dhaka |
| Al Hayat | Lebanon | Beirut |
| Al Anwar | Lebanon | Beirut |
| Al Nahar | Lebanon | Beirut |
| Al Howadess | Lebanon | Beirut |
| Al Dastour | Lebanon | Beirut |
| Al Massa | Lebanon | Beirut |
| Bangkok Post | Thailand | Bangkok |
| Kenyan Nation | Kenya | Nairobi |
| Frankfurt Allegiance | W. Germany | Frankfurt |
| China Times | Taiwan | Taipeh |
| Rudo Pravo | Czechoslovakia | Prague |
| Neues Deutschland | E. Germany | Dresden |
| Berliner Zeitung | E. Germany | Dresden |
| Le Europe | Italy | Rome |
| L. Unita | Italy | Rome |
| Al Sha'ab | Algeria | Rome |
| Al Thawara | Syria | Rome |
| Akbar-at-Kuwait | Kuwait | Kuwait |

# LITERATURE

## Official Books

**White Papers** Formerly issued by the British Parliament stating in brief the views of the government on a specific issue or giving an authoritative statement of facts. The whitepaper has come to be known as a policy statement published by the government on a subject of tremendous public importance.

- ✓ Blue Books — Official reports of the British Government.
- ✓ White Books — Official publications of Portugal, Germany and China.
- ✓ Yellow Books — Official records of France.
- ✓ Grey Books — Official policy statements and reports of the Belgian and Japanese Governments.
- ✓ Green Books — Official report of the Italian and Persian Governments.
- ✓ Orange Books — Official Publications of the Netherlands Government.

## Important Books and their Authors

| Author(s) | Book(s) |
|---|---|
| A Aziz | Discovery of Pakistan |
| Abdul Hamid | Muslim Separatism in India and Pakistan |
| Abdul Hassan Isphahani | Jinnah as I know him |
| Jinnah, Pakistan and Islamic Identity: the Search for Saladin | Akbar S. Ahmad |
| Abdul Kalam Azad | India wins Freedom |
| Abu Fazal | Akbar nama |
| Adam Smith | Wealth of Nation |
| Ahmed Hassan Dani | Quaid-i-Azam & Pakistan |
| Al Ghazali | Hujatul Islam |
| Alan Campbell Johnson | Mission with Mountbatten |
| Alastair Lamb | Incomplete Partition |
| Al-Farabi | Ara Madinatul Fazila |
| Allama Iqbal | Bal-e-Jibril |
| Allama Iqbal | Asrar-e-khudi |
| Allama Iqbal | Javed Nama |
| Allama Iqbal | Zabur-e-Ajam |
| Allama Iqbal | Zarb-e-Kaleem |
| Allama Iqbal | Payam-e-Mashriq |
| Allama Iqbal | The poem Shikwah and Jawab-e-Shikwa |
| Altaf Hussain Hali | Bang-e-dara |
| Altaf Hussain Hali | Mussaddas-i-Hali |
| Altaf Hussain Hali | Shaer o Shaeri |
| | Hayat-e-Jawaid (is on the life of Sir Syed Ahmed Khan) |

| | |
|---|---|
| Altaf Hussain Hali | Hayat-e-Javed |
| Altaf Hussain Hali | Yadgar-i-Galib |
| Ambedkar | Thought on Pakistan |
| Amir Khusro | Laila Majnoo |
| Angan | Khadija Mastoor |
| Aristotle | The lyceum |
| Ayub Khan | Friends not Masters |
| Azad Muhammad Hussain | Darbar-i-Akbari |
| Bahir Ahmad Dar | Religious Thought of Sayyid Ahmed Khan |
| Benazir Bhuto | Daughter of the East |
| Bertrand Russel | Road to Freedom |
| Bertrand Russel | Conquest of Happiness |
| British parliament | White Papers are policy statements published (on the subject of tremendous public importance) |
| C.M Doughty | Travel in Arabian Desert |
| Carlyle | Heroes and Hero-Worship |
| Catherine Clement | Edwina and Nehru |
| Ch Khaiquzzaman | Pathway to Pakistan |
| Ch Rahmat Ali | Emergence of Pakistan |
| Charles Darwin | Origin of species |
| Charles Dickens | Great Expectations |
| Charles Dickens | Oliver Twist |
| Charles Dickens | Pickwick papers |
| Charles Dickens | A Tale of Two Cities |
| Charles Dickens | Pickwick Papers |
| Charles Dickens | Hard Times |
| Coleridge | Ancient Mariner |
| Coleridge | Kubla Khan (Poem) |
| Daniel Defoe | Robinson Crusoe |
| Dan Brown | The Da Vinci Code |
| Dante | Divine Comedy |
| Dostoevsky | The idiot |
| Dr. Rajenra Parsad | India Divided is a book |
| Dr. Sachin | Birth of Pakistan |
| Dr. Tahir Amir | Birth of a tragedy |
| Earnest Hemingway | A farewell to Arms |
| Earnest Hemingway | The Sun also Rises |
| Edward Fitzgeranld | Rubaiyat of Omar Khayyam |
| Edward Gibbon | Decline and Fall of Roman Empire |
| Ernest Hamingway | Old man and the Sea |
| F M Dostoevsky | Crime and Punishment |
| Faiz Ahmed Faiz | Naqsh-e-Faryadi |
| Firdausi | Shahnama |
| G Allana | Quaid-e-Azam: The Story of A Nation |
| G Allana | Mohammad Ali Jinnah |
| G B Shaw | Caesar and Cleopatra |
| G B Shaw | Doctor's Dilemma |
| G W Choudhry | Constitutional Development of Pakistan |
| G W Shaw | Joan of Arc |
| George Orwell | Animal Farm |
| George Orwell | Nineteen Eighty Four |
| George Bernard Shaw | Arms and the Man |
| Goethe | Faust |
| H H Dodwell | The Cambridge History of the British Empire |
| Hafeez Jalandri | Shahnama-i-Islam |
| Hector Bolitho | Jinnah, Creator of Pakistan |
| Henry Kissinger | Profiles in Courage |
| Henry Kissinger | Nuclear Weapons and Foreign Policy |

| | |
|---|---|
| Henry Miller | Tropic of Cancer |
| Hitler | Mein KAMPF |
| Homer | Odyssey (Greek) |
| I H Qureshi | Struggle for Pakistan |
| I H Qureshi | A short history of Pak |
| I H Qureshi | History of Freedom Movement |
| Ibn Battuta | Ibn Battuta Travels in Asia and Africa |
| Ibn Khaldun | Muqaddamah |
| Ibn Sina | Kitab al Shifa |
| Ibne Sina | Al Qanoon fil Tib |
| Ilahi Bux | My Last day with Quaid |
| Imam Ghazali | Ihya-ul-Uloom |
| J S Mill | On liberty |
| Jack London | Call of the Wild- |
| Jaswant Sing | Jinnah: India, Partition, Independence |
| Jagmohan. | My Frozen Turbulence in Kashmir |
| Jane Austen | Pride and Prejudice |
| Jane Austin | Sense and Sensibility |
| Jodi Dean | Comrade: An Essay On Political Belongings |
| John Gray | Men are from Mars, Women are from Venus |
| John Masefield | Nine Days Wonder |
| John Milton | Paradise Lost |
| John Steinbeck | East of Aden |
| Jonathan Swift | Gulliver's Travels |
| K K Aziz | The Making of Pakistan |
| K K Aziz | Party politics in Pakistan |
| Kalidas | Raghuvamsa |
| Karen Armstrong | History of God |
| Karl Marx | Das Capitol |
| Karl Marx and Eagles | Communist Manifesto |
| Katherine Mayo | Mother India |
| Khalid B Saeed | Politics in Pakistan |
| Khurshid Mahmud Kasuri | Neither Hawk Nor Dove |
| Kiran Bedi | Freedom Behind Bars |
| Larry Collins | Freedom at Midnight |
| Lawrence Ziring | Pakistan the Formative Phase |
| Lenin | The state and revolution |
| Leo Tolstoy | War and Peace |
| Lewis Carrol | Alice in Wonderland |
| Lewis Carrol | Time Machine |
| Liaquat Ali Khan | Pakistan: the Heart of Asia |
| M H Saiyid | Muhammad Ali Jinnah |
| Machiavelli | The Prince |
| Mahatma Gandhi | My Experiments with Truth |
| Malik Hafeez | Muslim Nationalism in India |
| Mao | On contradictions |
| Margaret Mitchell | Gone with the Wind |
| Mathew Arnold | Sohrab and Rustam |
| Miguel De Cervates | Don Quixote |
| Michael Foucault | Madness and Civilizations |
| Mohammad Ali Choudhry | The Emergence of Pakistan |
| Montesquieu | The spirit of laws |
| Musarrt Hussain Zuberi | Voyage through History |
| Nazir Ahmed | Mirat ul Uroos |
| Nazir Yar Jung | The Pakistan Issue |
| Nelson Mandela. | Higher than Hopes |
| Noa Ben Artizi | In the name of Sorrow and Hope |

| | |
|---|---|
| Official policy as well as reports of the Japanese government | Grey Books |
| Official publication of the Netherlands | Orange Books |
| Official publications of the countries like Portugal, China, and Germany | White Books |
| Official records of France | Yellow Books |
| Official reports of the British Government | Blue Books |
| Official reports of the Italian government | Green Books |
| Oscar Wild | A woman of no importance |
| Oscar Wilde | An Ideal husband |
| P Calvocrassi | World Politics Since 1945 |
| Parveen Shakir | Khusboo |
| Paul Kennedy | Preparing for the Twenty First Century |
| Paul Kennedy | Rise and Fall of the Great Powers |
| Percival Smith | India, Pakistan & the West |
| Philip Woodruff | Man who ruled India |
| Plato | Republic |
| Plato | The Laws |
| Pope John Paul II. | Crossing the Threshold of Hope |
| Muammar Gaddafi | Green Book |
| R E M Wheeler | Five Thousand Years of Pakistan |
| R.L Stevenson | Treasure Island |
| Rabindranath Tagore | Gitanjali |
| Richard Symonds | The Making of Pakistan |
| Rousseau | Social Contract |
| Rousseau | Confession |
| Rudyard Kipling | Jungle book |
| Ruskin | Unto This Last |
| Samuel Johnson | Vanity of Human Wishes |
| Sharifuddin Pirzada | Evolution of Pakistan |
| Sheikh Saadi | Bostan |
| Sheikh Saadi | Gulistan |
| Siddique Saliq | Witness to surrender |
| Richard Burton | Arabian Nights |
| Sikandar Hayat Khan | Outline of a scheme of Indian Federation |
| Syed Ahmed Khan | Tehzeeb al Ikhlaq |
| Sri Aurobindo | Life Divine |
| Stanley Wolpert | Jinnah of Pakistan |
| Stanley Wolpert | Zulfi Bhutto of Pakistan |
| Stanley Woolpert | Jinnah of Pakistan |
| Syed Abdul ala Maudoodi | Tafhim ul Quran |
| Syed Ameer Ali | The spirit of Islam |
| Syed Hasan Raza | Pakistan Naguzeer Tha |
| Thomas Mooore | Utopia |
| Tomas Carlyle | French Revolution |
| Toni Morrison | Beloved (novel) |
| V D Savarkar | Indian War of Independence |
| V P Menon | Transfer of Power in India |
| Vincent Smith | Oxford History of India |
| W Churchill | The World Crisis |
| Will Durrant | The Lessons of History |
| W Shakespeare | Romeo and Juliet |
| W Shakespeare | Merchant of Venice |
| W Shakespeare | Anthony Cleopatra |
| W Shakespeare | As you like it |
| W Shakespeare | Comedy of Errors |
| W Shakespeare | Twelfth Night |
| W Shakespeare | Much Ado About Nothing |
| W Shakespeare | Hamlet |
| W W Hunter | The Indian Musalimans |
| Whaeed-uz-Zaman | Towards Pakistan |
| Wordsworth | Revolution and Independence |
| Zulifkar Ali Bhutto | Myth of independence |
| Zulifkar Ali Bhutto | Foreign Policy of Pakistan |

## List of Famous Autobiographies

| Author Name | Book Name |
|---|---|
| A P J Abdul Kalam | Wings of Fire |
| Adolf Hitler | Mein Kampf |
| Aerosmith | Walk This Way |
| Albert Einstein | Autobiographical Notes |
| Anne Frank | The Diary of a Young Girl |
| Arnold Schwarzenegger | Total Recall: My Unbelievably True Life Story |
| Bill Clinton | My Life |
| Babur | Baburnama |
| Barack Obama | Dreams from My Father |
| Benito Mussolini | My Autobiography: With the Political and Social Doctrine of Fascism |
| Benjamin Franklin | The Autobiography of Benjamin Franklin |
| Bertrand Russell | The Autobiography of Bertrand Russell |
| Charles Darwin | The Recollections of the Development of My Mind and Character |
| Charles Dickens | Autobiographical Fragment |
| Charlie Chaplin | My Autobiography |
| Dalai Lama | Freedom in Exile |
| Hillary Rodham Clinton | Living History |
| Jawaharlal Nehru | Towards Freedom |
| Jean-Paul Sartre | The Words |
| Leo Tolstoy | My Confession |
| Margaret Thatcher | Margaret Thatcher: The Autobiography |
| Marilyn Monroe | My Story |
| Mahatma Gandhi | The Story of My Experiments with Truth |
| Michael Jackson | Moonwalk |
| Muhammad Ali | The Greatest: My Own Story |
| Nelson Mandela | A Long Walk to Freedom |
| Ayyub Khan | Friends Not Masters |
| Oscar Wilde | De Profundis |
| Benazir Bhutto | Daughter of Destiny |
| Ronald Reagan | The Reagan Diaries |
| Sigmund Freud | An Autobiographical Study |
| Thomas Jefferson | Autobiography 1743-1790 |
| Usain Bolt | Faster than Lightning: My Autobiography |
| Qudrat Ullah Shahab | Shahabnama |
| Winston Churchill | Memoirs of the Second World War |
| Winston Churchill | My Early Life: 1874-1904 |

- Another famous book by Jean-Paul Sartre is Being and Nothingness.

## Books by Famous Politicians

| | |
|---|---|
| The Audacity of Hope: Thoughts on Reclaiming the American Dream | Barack Obama |
| Dreams From My Father | Barack Obama |
| A Promised Land | Barack Obama |
| Without Fear or Favour | Neelam Sanjeeva Reddy |
| Midnight Diaries | Boris Yelstin |
| Prison Diary | Jayaprakash Narayan |
| Indian Philosophy | Dr. S. Radhakrishnan |
| Hindu View of Life | Dr. S. Radhakrishnan |
| Matters of Discretion: An Autobiography | I K Gujral |
| A View from the Outside | P Chidambaram |
| Undaunted, Saving the Idea of India | P Chidambaram |
| Back to Work | Bill Clinton |
| Hard Choices | Hillary Clinton |
| Long Walk to Freedom | Nelson Mandela |
| Beyond Survival: Emerging Dimensions of Indian Economy | Shri Pranab Mukherjee |
| Saga of Struggle and Sacrifice | Shri Pranab Mukherjee |
| Challenges before the Nation | Shri Pranab Mukherjee |
| The Dramatic Decade: The Days of Indira Gandhi | Shri Pranab Mukherjee |
| Changing India | Dr. Manmohan Singh |
| Exam Warriors | Narendra Modi |
| My Unforgettable Memories | Mamata Banerjee |
| Citizen and Society | Hamid Ansari |
| Citizen Delhi: My Life, My Times | Sheila Dikshit |
| India Unmade | Yashwant Sinha |
| Golden Threshold | Sarojini Naidu |
| The Broken Wing, Songs of Life, Death & the Spring | Sarojini Naidu |
| The Birds of Time, Songs of Life, Death & the Spring | Sarojini Naidu |
| The Sceptred Flute: Songs of India | Sarojini Naidu |
| The Feather of the Dawn | Sarojini Naidu |
| India Divided | Dr. Rajendra Prasad |
| India Wins Freedom | Maulana Abul Kalam Azad |
| Ghubar-e-khatir | Maulana Abul Kalam Azad |
| Unhappy India | Lala Lajpat Rai |
| Poverty and Un-British Rule in India | Dadabhai Naoroji |
| Geeta Rahashya | Bal Gangadhar Tilak |
| The Arctic Home in the Vedas | Bal Gangadhar Tilak |
| The Indian War of Independence of 1857 | V.D. Savarkar |
| The Insider | PV Narasimha Rao |
| My Country My Life | LK Advani |
| Wings of Fire | APJ Abdul Kalam |
| Ignited Minds | APJ Abdul Kalam |
| You Are Unique | APJ Abdul Kalam |
| India 2020 | APJ Abdul Kalam |
| Indomitable Spirit | APJ Abdul Kalam |
| Turning Points - A Journey through Challenges | APJ Abdul Kalam |
| Target 3 Billion | APJ Abdul Kalam and Srijan Pal Singh |
| My Journey Transforming Dreams into Actions | APJ Abdul Kalam |
| Governance for Growth in India | APJ Abdul Kalam |
| Jobs for Our Millions | VV Giri |
| Mein Kampf | Adolf Hitler |
| My Presidential Years | R Venkataraman |
| My Own Boswell | M Hidyatullah |
| My Experiments with Truth | Mahatma Gandhi |
| Hind Swaraj | Mahatma Gandhi |
| Key to Health | Mahatma Gandhi |
| Discovery of India | Jawaharlal Nehru |
| Glimpses of World History | Jawaharlal Nehru |
| The Indian Struggle 1920-1942 | Subhash Chandra Bose |
| My Truth | Indira Gandhi |

## Famous Fiction Awards

| Award | Purpose |
|---|---|
| BookBrowse Awards | Since 2000, BookBrowse has asked its members and subscribers to select the best books published each year. Through a rigorous voting process, this shortlist is then honed down to find the BookBrowse Awards Winners. |
| Pulitzer Prize for Letters, Drama and Music | Joseph Pulitzer, a renowned journalist, established this award in 1917. Since 1984 Pulitzer winners have received their prizes from the president of Columbia University at a luncheon in May in the rotunda of the Low Library in the presence of family members, professional associates, board members, and the faculty of the School of Journalism. |
| Booker Prize | Awarded in October each year, the Booker Prize is the UK's top literary prize and the most watched single-book award in the English-speaking world. Until 2013 the award was open only to citizens of the Commonwealth of nations (in essence, the UK and former British colonies). As of 2014 the award is open to authors worldwide so long as their work is in English and published in the UK |
| The John Newbery Medal | The Newbery Medal is awarded in January each year by the American Library Association for the most distinguished American children's book published the previous year. |
| Edgar Awards | Mystery Writers of America is the premier organization for mystery writers, professionals allied to the crime writing field, aspiring crime writers, and those who are devoted to the genre. |

## Books about Afghan Tribal Revolts

| Start date | End date | Work | Author(s) |
|---|---|---|---|
| 1944 | 1945 | Rebuilding Afghanistan's National Army (Journal of the US Army War College) | Ali Jalali |
| 1944 | 1946 | Afghanistan: Graveyard of Empires: A New History | David Isby |

| | | | |
|---|---|---|---|
| | | of the Borderland | |
| 1945 | 1945 | Conflict in Afghanistan: A Historical Encyclopedia | • Frank Clements<br>Ludwig Adamec |
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## Renowned books by Stanley Wolpert

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|---|---|
| A New History of India | 1977 |
| Nehru: A Tryst With Destiny | 1996 |
| Shameful Flight | 2006 |
| Gandhi's Passion: The Life and Legacy of Mahatma Gandhi | 2001 |
| India | 1964 |
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## Famous Poets of the World

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|---|---|---|
| Faiz Ahmed Faiz | Pakistan | Hum Dekhein Gay |
| Mirza Ghalib | British India | Aah Ko Chahye Ik Umar Asar Hone Tak |
| Ahmad Faraz | Pakistan | Pas Andaaz |
| Edgar Allen Poe | United States | The Raven |
| William Shakespeare | England | Shall I Compare Thee To A Summer's Day? |
| Allama Iqbal | Pakistan | Zaboor-e-Ajam |
| Maya Angelou | United States | On the Pulse of Morning |
| Emily Dickinson | United States | Hope is the thing with Feathers |
| Shel Silverstein | United States | Where the Sidewalk Ends |
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| Thomas Hardy | England | Hap |
| Oscar Wilde | Ireland | A Vision |
| John Keats | England | A Thing of Beauty |
| William Blake | England | The Tyger |
| William Wordsworth | England | The Prelude |
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| Name | Occupation | Year |
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| | | |
|---|---|---|
| Sylvia Plath | Poet/Author | 1963 |
| Ernest Hemingway | Author | 1961 |
| Hunter S. Thompson | Journalist | 2005 |
| Vincent Van Gogh | Painter | 1890 |
| Virginia Woolf | Author | 1941 |
| Ray Combs | Comedian | 1996 |

## Foreign Words & Phrases

**Ab initio:** From the very beginning
**Ab extra:** From the outside
**Ad hoc:** Arrangement for some special purpose
**Ad infinitum:** Without limit
**Ad interim:** In the meantime
**Ad nauseam:** To a disgusting extent
**Ad valorem:** According to the value of
**Agent provocateur:** A spy who works secretly and creates disturbance
**Alma mater:** The institution where one has been educated
**Aide de camp (pronounced as 'Cong'):** The personal attendant of a high military officer
**Aide memoire:** A reminder; a notebook in which things are noted
**Alter ego:** Fast friends
**Ante meridiem:** (a.m.) between midnight and noon
**Anno Domini:** In the year of our Lord (A.D.)
**Annus mirabilis:** A year of wonders
**Apologia:** An apologetic writing
**Aqua:** Water
**Bona fide:** Good faith, honesty, sincerity
**Billet d'amour:** A love-letter
**Bete noire:** Object of dislike
**Beau ideal:** Model; finest specimen
**Bon voyage:** A happy journey
**Bizarre:** Electric, fantastic; grotesque
**Bon bon:** Sweetmeat
**Bourgeoisie:** The middle class
**Boulevard:** A street shaded with trees
**Beau monde:** A false rumors or statement
**Carte blanche:** Full authority
**Bourgeois:** A member of the middle class; a merchant; concerned with material possessions and social status
**Cadre:** A list or rank of officers
**Cortege:** A train of attendants; followers
**Cafe:** a restaurant
**Chauffeur:** Motor-car driver
**Coup d'etat:** Sudden overthrow of an established government
**Cliché:** A hackneyed (much used) literary expression
**Charge d'affaires:** Ambassador to a small country
**De facto:** In fact though not in law
**De jure:** In law though not in fact
**De novo:** Afresh; from the very beginning
**Dei gratia:** By the grace of God
**De profundis:** Cry from the depth of sorrow
**Debacle:** Sudden route; complete defeat
**Debut:** First appearance on the stage or society
**Divide at impera:** A policy of divide and rule
**Dramatis personae:** Characters in a novel or drama
**Denouement:** End
**En bloc or En masse:** In a body; all together
**En route:** On the way
**Émigré:** An emigrant (one who goes and lives in another country
**Ex officio:** In virtue of one's office
**Ex parte:** One-sided
**El dorado:** A country full of gold
**Exempli gratia:** (e.g.) for example
**Exit:** Leaves the stage
**Exeunt:** More than one go off the stage
**Elite:** Echoice; gentry
**Esprit de corps:** The spirit of belonging to the same group
**En tente:** Understanding
**Errata:** A list of errors
**Façade:** The front of a building
**Fait accompli:** Something already done or accomplished
**Fiancé:** one's betrothed (male)
**Fiancée:** One's betrothed (female)
**Faux pas:** A mistake
**Facsimile:** An exact copy
**Genre:** Particular style or kind especially of works of art or literature
**Gendarmes:** armed police
**Honoris causa:** For the sake of honour
**Hauteur:** Haughtiness of manner

## World's Famous Composers & Musicians

| Name | Country |
|---|---|
| Anwar, Khawaja Khursheed (March 21, 1912-October 30, 1984) | Pakistani |
| Beethoven, Ludwig van (1772-1827) | German |
| Bizmi, Nisar (1925-March 22, 2007) | Pakistani |
| Chopin, Frederic (1810-1849) | Polish-French |
| Grieg, Edvard (1843-1907) | Norwegian |
| Haydn, Franz Joseph (1732-1809) | Austrian |
| Mehdi Hasan (1927-) | Pakistani |
| Mozart, Wolfgang Amadeus (1750-1791) | Austrian |
| Nusrat Fateh Ali Khan (1948-1997) | Pakistani |
| Shanker Ravi (1920-) | Indian |
| Tansen (16th century) | Indian Sub continent |
| Yehudi, Menuhin (1916-1999) | American |
| Zubin, Mehta (1936-) | Indian |

## Books by Pakistani Authors:

### Ayesha Jalal

- The Struggle for Pakistan
- The Pity of Partition: Manto's Life, Times, and Work Across the India-Pakistan Divide
- Partisans of Allah: Jihad in South Asia
- Self and Sovereignty
- Democracy and Authoritarianism in South Asia
- Democracy and Authoritarianism in South Asia: A Comparative and Historical Perspective
- State of martial rule
- The Sole Spokesperson

### Fatima Bhutto

- Songs of Blood and Sword
- The Runaways
- New Kings of the World: Dispatches from Bollywood, Dizi and K-Pop
- The Shadow of the Crescent Moon

- New Kings of the World: The Rise and Rise of Eastern Pop Culture
- Whispers of the Desert
- 8:50 am October 8, 2005: Stories of Hope and Courage from the Earthquake in Pakistan
- Democracy (Penguin Petit)

### Ishrat Hussain

- Economic Management in Pakistan, 1999-2002
- International Organizations and Nigerian Agricultural Development
- How Did The Asian Countries Avoid the Debt Crisis?
- Dollars, Debt and Deficits
- Perspectives on the Nigerian Economy
- Future Financing Needs of The Highly Indebted Countries

### Famous Literary Festivals in Pakistan:

- Hyderabad Literature Festival
- Islamabad Literature
- Karachi Literature Festival
- Lahore Literary Festival
- Sindh Literature Festival

**Facts about famous personalities from media**

Michael Jackson, who is famously known as the 'King of Pop' was an American singer and songwriter, who died in June 2009.

# WORLD HISTORY

## Major Wars in History

| Name | Date | Won By | Against |
|---|---|---|---|
| American War of Independence | 1775-1783 | Thirteen colonies | Britain |
| Austrian Succession war | 1740-1748 | Austria, Hungary Britain, Holland | Poland, Prussia, Sardinia, Saxony, Spain |
| Boer War | 1899-1902 | Britain | Boer Republics |
| Chinese-Japanese War | 1894-1895 | Japan | China |
| | 1931-1933 | Japan | China |
| | 1937-1945 | China | Japan |
| Civil War, American | 1861-1865 | 11, Northern States | 11, Southern States |
| Civil War, English | 1642-1651 | Parliament | Charles-I |
| Civil War, Spanish | 1936-1939 | Junta de Defensa Nacional | Republican government |
| Crimean War, | 1853-1856 | Britain, France Sardinia, Turkey | France |
| France, Prussian War | 1870-1871 | Prussia and German States | France |
| Gulf War | 1991 | Allied Forces Under US | Iraq |
| Hundred Years War | 1333-1453 | France | England |
| Korean War | 1950-1953 | South Korea and UN Forces | North Korea and Chinese |
| Napoleonic Wars | 1792-1815 | Austria, Britain, Prussia, Russia etc. | France |
| Peloponnesian War | 431-404 BC | Peloponnesian League | Delian League |
| Punic Wars | 254-146 BC | Rome | Carthage |
| Russo-Japanese War | 1904-1905 | Japan | Russia |
| Seven Years War | 1756-1763 | Britain, Prussia Hanover | Austria, France Russia, Sweden |
| Spanish-American War | 1898 | U.S. | Spain |
| Spanish Succession War | 1701-1714 | England, Prussia Austria, Netherland | Cologne, Mantna, Savoy |
| Thirty years war etc. | 1618-1648 | France, Sweden | The holy Roman Empire & Spain |
| Vietnam War | 1957-1975 | North Vietnam | South Vietnam and U.S. |
| War of 1812 | 1812-1815 | U.S. | Britain |
| War of Roses | 1456-1485 | House of Lancaster | House of York |
| World War I | 1914-1918 | Belgium-Britain | Austria, Hungary, Bulgaria, Germany, Ottoman empire |
| World War II | 1939-1945 | Austria, Belgium, Britain, Canada, China, Denmark, France, Netherlands, Newzealand, Norway, Poland, Russia, S.Africa, U.S., Yugoslavia | Bulgaria, Finland, Germany, Hungary, Italy, Japan, Romania |

## Conquests of Germany in the 20th century (1939-1942)

| Country | Year |
|---|---|
| Poland | 1939 |
| Denmark | 1940 |
| Norway | 1941 |
| Belgium | 1940 |
| Netherlands | 1940 |

| | |
|---|---|
| Luxembourg | 1940 |
| France | 1940 |
| Yugoslavia | 1941 |
| Greece | 1941 |

## Ages in History, Literature, Mythology

| | |
|---|---|
| Atomic Age | Period since the explosion of the first atom bomb at Alamogordo, New Mexico on July 16, 1945. |
| Augustan Age | It refers to the reign of the Emperor Augustus 27 BC to 14 BC in Latin literature, (2) English literature the early 18th century, (3) In French literature in 1600. |
| Bronze Age | Period when people used bronze tools; period from 3000 to 100 BC. |
| Dark Ages | Period from the fall of Rome in 476 AD until 1000s. |
| Elizabethan Age | Period of the feudal system in Europe from 700s to 1400s. |
| Golden Age | The best period of a country or literature is called the Golden Age. |
| Ice Age | Period beginning from 1000,000 years ago in which a series of ice caps covered most of the northern part of the earth. |
| Iron AGE | Period when people first used iron tools and weapons, It began at about. 1200 BC and lasted 100 years. |
| Machine Age | Name given to the period of industrialization in Britain began in 1750. |
| Middle Age | Period between ancient times and the modern period often given as between the fall of Roman Empire in AD 476 to the fall of Constantinople in AD 453. |
| Age Of Reason | The 18th century when philosophy was gaining ground in Europe. |
| Stone Age | Period before the Bronze Age in which men used tools and weapons made of stone. It began about 1000,000 years ago. |
| Victorian Age | Period when Queen Victoria reigned i.e. 1837 -1901. It was an age of technological progress and public morality. |

## Alternative Names of Famous Persons

| Original Name | Abbreviated or Alternative | Original Name | Abbreviated or Alternative |
|---|---|---|---|
| Abdul Ghaffar Khan | Badshah Khan, Frontier Gandhi | Allama Iqbal | Poet of the East |
| Adolf Hitler | Further (also Fuehrer) | Amir Khusrow | Voice of India (Tuti-e-Hind) |
| Alfred Hitchcock | Master of Suspense | Attila | The Scourge of God |
| Bal Gangadhar Tilak | Lokmanya | Benito Mussolini | Second Duce |
| Benazir Bhutto | Daughter of The East | Dadabhai Naorji | Grand Old man of India |
| Duke of Wellington | Iron Duke | David Eisenhower | Ike |
| Earl of Warwick | King Maker | Edward | The Confessor |
| Edison | The Wizard of Menlo park | Elvis Presley | King of Rock and Roll |
| Edmund Spencer | Poet's Poet | Erwin Rommel | Desert Fox |
| Fatima Jinnah | Maa-der-Millat | Francis Xavier | The Apostle of the Indies |
| Florence Nightingale | Lady of the Lamp | Francisco Franco | El Caydillo |
| Gandhi | The Mahatma | George Washington | American Fabius |
| Gautama | The Enlightened one, The Light of Asia | Gen. Franco | Caudillo |
| George Bernard Shaw | G.B.S. | Gladstone | Grand Old Man of Britain |
| George Eliot | Mary Ann Evans | Gulbuddin Hekmatyar | Butcher of Kabul |
| Henry | The Navigator | Huien Tsang | Prince of Pilgrimage |
| Ibn Batuta | The traveler of Islam | Ivan | The Terrible |
| Jawaharlal Nehru | Chacha, Pandit | Julius Caesar | The Greatest of the Romans |
| Jayaprakash Narayan | J.P. Loknayak | Jesus Christ | Good Shepherd- Light of the world |
| John Calvin | The Acquisitive Case | Justinian | The Law giver |
| Joan of Arc | Maid of Orleans | Kitchener of Khartoum | K of K |
| Lal Bahadur Shastri | Man of Peace | Louis XIV | The Sun King |
| Lala Lajpat Rai | Punjab Kesan, Lion of Punjab (Sher-i-Punjab) | Louis XV | The Grand Monarch |
| Mark Twain | Sameul Clemens | Margarette Thatcher | Iron Butterfly, Iron Lady |
| M.K. Gandhi | Bapu, Mahatma; Father of the Nation | Muhammad Ali Jinnah | Quaid-i-Azam. Great Leader |
| M.S. Golwalkar | Guruji | Mussolini | Second Duke |
| Madam Mohan Malaviya | Mahamana | Mustafa Kamal | Grey Wolf, Ataturk |
| Napoleon Bonaparte | Little Corporal; Man of Destiny, child of revolution | Neil Armstrong | Columbus of Space |

| | | | |
|---|---|---|---|
| Narendra Modi | Butcher of Gujrat | Nero | The Mad Emperor |
| Oliver Cromwell | The Lord Protector | Otto von Bismarck | Man of Blood and Iron |
| Pitt the Younger | Great Commoner | Queen Elizabeth I | Maiden Queen, The Virgin Queen |
| Rabindra Nath Tagore | Gurudev | Rasputin | The Mad Monk |
| Ranjit Singh | The Lion of Punjab | Ratko Mladić | Butcher of Bosnia |
| Rajinder Singh | Maj. Gen. Sparrow | Richard Cobden | Apostle of Free Trade |
| Richard I | The Lion Heart | Samuel Langhorwe | Mark Twain Clemeas |
| Sarojini Naidu | Nightingale of India | Sheikh Mujibur Rahman | Bangabandhu |
| Shabash Chandra Bose | Neta ji | Sheikh Abdullah | Lion of Kashmir |
| Shakespeare | Bard of Avon | T. Prakasam | Andhra Kesari |
| T.T. Krishnamachari | T.T.K. | Title of kings of Ethiopia | Negus |
| Vallabhbai Patel | Man of Iron; Strong Man of India | Walter Scott | Wizard of the North |
| William the Conqueror | William the Bastard | William Shakespeare | Bard of Avon |
| William II | Emperor Kaiser | Younger Pitt | Grand Commander |

## Important Wars and Revolutions

### WARS

- Napoleonic Wars (1803-1815)
- Greek War of Independence (1821-1832)
- French invasion of Spain (1823)
- Russo-Persian War (1826-1828)
- Russo-Turkish War (1828-1829)
- Hungarian Revolution and War of Independence (1848-1849)
- First Schleswig War (1848-1851)
- Wars of Italian Independence (1848–1866)
- First Italian Independence War (1848–1849)
- The War of 1859 (1859)--Also known as the Second Italian War of Independence
- Third Italian War of Independence (1866)
- Russo–Turkish War (1877–1878)
- Serbo-Bulgarian War (1885)
- Greco–Turkish War (1897)
- Opium Wars were fought between 1839-1842, and the participants were Britain and China.
- The First Mysore War was fought between the East India Company and the Sultanate of Mysore in the duration of 1766-1769.
- **Crimean War (1854–1856):** France, Britain and Sardinia joined hands to defend Ottoman Empire from Soviet invasion. Most events of this war took place in Crimea.
- **Second Schleswig War (1864):** Austria and Prussia colluded against Denmark to take Schleswig and make it a part of Germany.
- **Austro-Prussian War (1866):** In this short conflict Prussia, forced Austria out of German affairs.
- **Franco-Prussian War (1870-1871):** It was the last of the German Unification Wars, this war led to the formation of the German Empire (The Second Reich), and resulted directly in the First World War.
- **World War 1 (28 July 1914 - 11November 1918)** Treaty of Versailles: Treaty of Versatile officially marked the end of WW1. It is one of the greatest peace treaties in history. Treaty was signed on 28 June 1919. Its aim was to punish Germany by the Allied powers. The League of Nation was also created as an outcome of this treaty.
- **Treaty of Sevres:** It was signed on 10 August 1920 and it led to the breakdown of Ottoman Empire.
- World War 2 (1 September 1939 - 2 September 1945) During World war II, two Japanese towns, Hiroshima and Nagasaki, were attacked with a nuclear bomb by the United States

### REVOLUTIONS:

- **Saur Revolution**
  The Saur Revolution, also known as the April Revolution was a coup led by Soviet-backed People's Democratic Party of Afghanistan against the rule of Afghan President Mohammed Daoud Khan. The revolution resulted in the murder of Mohammed Daoud and his family, and the creation of a government with Nur Muhammad Taraki as the President. This became a precursor for the soon-to-happen Soviet invasion in Afghanistan and the Soviet-Afghan War against the Mujahideen.

- **Russian Revolution**
  Russian revolution includes two revolutions, February Revolution 1917 and October Revolution 1917. The Feb Revolution led to the fall of the then Emperor Nicholas II and establishment of a provisional government. The October revolution led by Vladimir Lenin resulted in the overthrow of the provisional government and establishment of communist state. Slogan: All Power to Russians.

- **American Revolution (1765-1783)**
  The reason for this revolution was American colonies' denial to submit to Great Britain King and Parliament authority. Revolution ended in the drafting of the US constitution and later independence of the USA. Slogan: No vacation without representation

- **French Revolution (1789-1799)**
  Roots of this revolution are usually related to economic inequality. In the aftermath of this revolution Monarch was replaced with democratic republic. Slogan: Liberty, Equality, Fraternity.

- **Xinhai Revolution (1911)**
  The Xinhai Revolution led to the fall of the last imperial dynasty, the Qing Dynasty. Dissatisfaction among the

masses due to archaic policies of the Qing Dynasty led to this revolution. This revolution lasted for 4 months and imperial rule was replaced with the Provisional Government of the Republic of China. Motto: Take one province by force and inspire the other province to rise up.

- **Cuban Revolution (26 July 1953-1 January 1959)**
  Cuban revolution led to the overthrow of Batista led authoritarian regime. Revolution lasted from 26 July 1953-1 January 1959. Cuban population was under heavy economic stress. It was at that time when Fidel Castro, his brother Raul Castro and Che Guevara (from Argentina) began sporadic attacks against the government and eventually seized control of the country on 1st January 1959. Slogan: Patria o Muerte (Homeland or death)
- **Iranian Revolution (January 1978-February 1979)**
  Iranian revolution was led by agitated Iranians who were against the US backed regime of Mohamed Reza Shah Pahlavi. Revolution resulted in the overthrow of Pahlavi rule and it was replaced with an Islamic state led by Grand Ayatollah Ruhollah Khomeini. Slogan: Death to America
- **Chinese Communist Revolution 1949:**
  Mao Zedong (leader of Chinese Communist Party) on 1st October 1949 proclaimed the creation of the People's Republic of China (PRC). It marked the end of civil war between the Chinese Communist Party and the National Party , which initiated soon after WWII. The formation of PRC led to an end of a long governmental crisis in China which started with the Chinese Revolution in 1911. However, as mainland China fell to the communists in 1949, the US suspended all diplomatic relations with the PRC for several decades.
- **14 July Revolution/1958 coup d'etat (14 July 1958)**
  Revolution led to the overthrow of the Hashemite Monarch established by King Faisal in 1921. Following the revolution Abd al Karim Basit became the Prime Minister of Iraq who was later killed in 1963 during the Ramadan Revolution.

## Facts about Vietnam War

The U.S. first got involved in Vietnam in 1954. U.S. and South Vietnamese Presidents were shot in 1963. The Gulf of Tonkin Incident is the catalyst for the escalation of American action in Vietnam. It refers to two incidents in August 1964.

## List of Important Days and Dates

### January

| | |
|---|---|
| January 4: | World Braille Day |
| January 6: | World Day for War Orphans |
| January 27: | International Holocaust Remembrance Day |
| January 28: | Data Protection Day |
| January 31: | Leprosy Prevention Day |

### February

| | |
|---|---|
| February 2: | World Wetlands Day |
| February 4: | World Cancer Day |
| February 12: | Darwin Day |
| February 13: | World Radio Day |
| February 14: | Valentine's Day |
| February 20: | World Day of Social Justice |
| February 21: | International Mother Language Day |
| February 22: | World Scout Day |

### March

| | |
|---|---|
| March 1: | World Civil Defence Day |
| March 4: | World Day of the Fight Against Sexual Exploitation |
| March 8: | International Women's Day, World Kidney Day |
| March 15: | World Consumer Rights Day |
| March 21: | World Sleep Day |
| March 21: | International Day for the Elimination of Racial Discrimination, Forests Day |
| March 22: | World Day for Water, World Poetry Day |
| March 23: | World Meteorological Day |
| March 24: | World Tuberculosis Day |
| March 27: | World Theatre Day |

### April

| | |
|---|---|
| April 2: | World Autism Awareness Day |
| April 4: | World Pillow Day |
| April 7: | World Health Day |
| April 12: | World Street Children Day |
| April 17: | World Farmers Day |
| April 22: | Earth Day |
| April 23: | World Book and Copyright Day |
| April 24: | World Veterinary Day |
| April 25: | World Malaria Day, International DNA Day |
| April 26: | World Intellectual Property Day |
| April 28: | World Day for Safety & Health at Work |
| April 29: | World Dance Day |

### May

| | |
|---|---|
| May 1: | May Day - Labour Day |
| May 3: | World Press Freedom Day, World Asthma Day |
| May 4: | International Firefighters' Day |
| May 5: | World Midwives Day |
| May 7: | World Engineers Day |
| May 8: | World Red Goss 6 Red Crescent Day, Thalassaemia Day |
| May 9: | World Mothers Day |
| May 12: | International Nurses Day, International Just Trade Day |
| May 14: | Bone & Joint Day |
| May 15: | International Day of Families |
| May 17: | World Hyper Tension Day, World Telecommunication Day |
| May 18: | World Museum Day |
| May 19: | Hepatitis Day |

| | |
|---|---|
| May 21: | World Anti-Terrorism Day |
| May 22: | International Day for Biological Diversity |
| May 23: | World Squash Day, World Turtle Day |
| May 28: | Anti-Narcotics Day, Engineers Day |
| May 29: | UN Peace Missions Day |
| May 30: | World Sports Day |
| May 31: | World No Tobacco Day |
| 1st Tuesday of May: | World Asthma Day |
| 2nd Saturday of May: | World Fair Trade Day |

## June

| | |
|---|---|
| June 1: | International Children's Day, World Milk Day |
| June 5: | World Environment Day |
| June 8: | World Brain Tumour Day. World Ocean Day |
| June 9: | International Accreditation Day |
| June 12: | World Day against Child Labour |
| June 14: | World Blood Donor Day |
| June 18: | International Picnic Day |
| June 20: | World Refugee Day |
| June 21: | World Music Day |
| June 23: | Public Service Day |
| June 26: | Anti-Narcotics Day, Anti-Violence Day |
| 3rd Sunday in June: | Fathers' Day |

## July

| | |
|---|---|
| July 2: | Sports Journalism Day |
| July 4: | World Cooperative Day |
| July 11: | World Population Day |
| July 24: | World Parents Day |
| July 28: | Hepatitis Day |
| July 30: | World Friendship Day |

## August

| | |
|---|---|
| August 3: | World Friendship Day |
| August 8: | International Day of the World's Indigenous People |
| August 11: | World Minorities Day |
| August 12: | International Youth Day |
| August 13: | Left Handers Day |
| August 19: | World Humanity Day, World Breast Feeding Day |
| August 23: | World Slavery Abolition Day |
| August 30: | International Day of the Disappeared |

## September

| | |
|---|---|
| September 4: | World Veil Day |
| September 5: | World Vulture Day |
| September 8: | International Literacy Day, World Physiotherapy Day |
| September 10: | Suicide Prevention Day |
| September 11: | World First Aid Day |
| September 12: | World Oral Health Day |
| September 13: | Grand Parents Day |
| September 15: | International Day of Democracy |
| September 16: | International Day for the Preservation of the Ozone Layer |
| September 21: | World Alzheimer's Day |
| September 22: | Car Free Day |
| September 24: | World Clean-up Day |
| September 26: | World Heart Day |
| September 27: | World Tourism Day |
| September 28: | World Rabies Day |

## October

| | |
|---|---|
| October 1: | World Vegetarian Day. Senior Citizens Day |
| October 2: | International Day of Non-Violence |
| October 3: | World Habitat Day |
| October 4: | World Animal Day |
| October 5: | World Teachers' Day |
| October 7: | World Employment Day, World Smile Day |
| October 8: | World Humanitarian Action Day, World Natural Calamities Prevention Day, World Sight Day |
| October 9: | World Post Day |
| October 10: | World Mental Health Day, World Egg Day, World Anti-Capital Punishment Day |
| October 11: | World Girls Day |
| October 12: | World Arthritis Day |
| October 14: | World Standards Day |
| October 15: | International Day of Rural Women, Global Hand Washing Day, World White Stick Day |
| October 16: | World Food Day |
| October 17: | International Day for the Eradication of Poverty |
| October 20: | World Chefs Day |
| October 24: | United Nations Day, World Acupuncture Day |
| October 24: | World Development Information Day |
| October 31: | World Savings Day |

## November

| | |
|---|---|
| November 9: | World Freedom Day, World Inventors Day |
| November 10: | World Science Day |
| November 12: | World Pneumonia Day |
| November 14: | World Diabetes Day |
| November 16: | International Day for Tolerance |
| November 17: | International Studies Day |
| November 19: | World Toilet Day |
| November 20: | Universal Children's Day |
| November 21: | World Hello Day |
| November 21: | World Television Day |
| November 21: | World Fishermen's Day |
| November 25: | International Day for the Elimination of Violence against Women |
| November 29: | International Day of Solidarity with the Palestinian People |
| 3rd Sunday in November : | Traffic Accident Victims Day |

| December | |
|---|---|
| December 1: | World AIDS Day |
| December 2: | International Day for the Abolition of Slavery |
| December 3: | International Day of Disabled Persons |
| December 5: | International Volunteer Day |
| December 7: | International Civil Aviation Day |
| December 9: | The International Day against Corruption. World Allergy Day |
| December 10: | Human Rights Day |
| December 11: | International Mountain Day |
| December 14: | World Monkeys Day |
| December 15: | World Tea Day |
| December 18: | International Migrants Day |
| December 20: | International Human Solidarity Day |

## More International Days

Source: United Nations website

| JANUARY | |
|---|---|
| 4 January | World Braille Day |
| 24 January | International Day of Education |
| 27 January | International Day of Commemoration in Memory of the Victims of the Holocaust |
| **FEBRUARY** | |
| 4 February | World Cancer Day |
| 6 February | International Day of Zero Tolerance to Female Genital Mutilation |
| 10 February | World Pulses Day |
| 11 February | International Day of Women and Girls in Science |
| 13 February | World Radio Day |
| 20 February | World Day of Social Justice |
| 21 February | International Mother Language Day |
| **MARCH** | |
| 1 March | Zero Discrimination Day |
| 3 March | World Wildlife Day |
| 8 March | International Women's Day |
| 20 MARCH | International Day of Happiness |
| 20 March | French Language Day (French) |
| 21 March | International Day for the Elimination of Racial Discrimination |
| 21 March | World Poetry Day |
| 21 March | International Day of Nowruz |
| 21 March | World Down Syndrome Day |
| 21 March | International Day of Forests |
| 22 March | World Water Day |
| 23 March | World Meteorological Day |
| 24 March | World Tuberculosis Day |
| 24 March | International Day for the Right to the Truth concerning Gross Human Rights Violations and for the Dignity of Victims |
| 25 March | International Day of Remembrance of the Victims of Slavery and the Transatlantic Slave Trade |
| 25 March | International Day of Solidarity with Detained and Missing Staff Members |
| **APRIL** | |
| 2 April | World Autism Awareness Day |
| 4 April | International Day for Mine Awareness and Assistance in Mine Action |
| 6 April | International Day of Sport for Development and Peace |
| 7 April | International Day of Reflection on the 1994 Genocide against the Tutsi in Rwanda |
| 7 April | World Health Day [WHO] |
| 12 April | International Day of Human Space Flight |
| 20 April | Chinese Language Day (Chinese) |
| 21 April | World Creativity and Innovation Day |
| 22 April | International Mother Earth Day |
| 23 April | World Book and Copyright Day |
| 23 April | English Language Day |
| 23 April | Spanish Language Day (Spanish) |
| 24 April | International Day of Multilateralism and Diplomacy for Peace |
| 25 April (starting in 2020) | International Delegate's Day |
| 25 April | World Malaria Day [WHO] |
| 25 April | International Girls in ICT Day [ITU] |
| 26 April | International Chernobyl Disaster Remembrance Day |
| 26 April | World Intellectual Property Day [WIPO] |
| 28 April | World Day for Safety and Health at Work |
| 30 APRIL | International Jazz Day |
| **MAY** | |
| 2 May | World Tuna Day |
| 3 May | World Press Freedom Day |
| 8-9 May | Time of Remembrance and Reconciliation for Those Who Lost Their Lives During the Second World War |
| 11 May (second Saturday of May) | World Migratory Bird Day [UNEP] |
| 15 May | International Day of Families |
| 16 May | International Day of Living Together in Peace |
| 16 May | International Day of Light [UNESCO] |
| 17 May | World Telecommunication and Information Society Day |
| 17 May | "Vesak", the Day of the Full Moon |
| 20 May | World Bee Day |
| 21 May | World Day for Cultural Diversity for Dialogue and Development |
| 22 May | International Day for Biological Diversity |
| 23 May | International Day to End Obstetric Fistula |
| 29 May | International Day of UN Peacekeepers |
| 31 May | World No-Tobacco Day [WHO] |
| **JUNE** | |
| 1 June | Global Day of Parents |
| 3 June | World Bicycle Day |
| 4 June | International Day of Innocent Children Victims of Aggression |
| 5 June | World Environment Day |
| 5 June | International Day for the Fight against Illegal, Unreported and Unregulated Fishing |
| 6 June | Russian Language Day (Russian) |
| 7 June | World Food Safety Day |
| 8 June | World Oceans Day |
| 12 June | World Day Against Child Labour |
| 13 JUNE | International Albinism Awareness Day |
| 14 June | World Blood Donor Day [WHO] |

| | |
|---|---|
| 15 June | World Elder Abuse Awareness Day |
| 16 June | International Day of Family Remittances |
| 17 June | World Day to Combat Desertification and Drought |
| 18 June | Sustainable Gastronomy Day |
| 19 June | International Day for the Elimination of Sexual Violence in Conflict |
| 20 June | World Refugee Day |
| 21 June | International Day of Yoga |
| 21 June | International Day of the Celebration of the Solstice |
| 23 June | United Nations Public Service Day |
| 23 June | International Widows' Day |
| 25 June | Day of the Seafarer [IMO] |
| 26 June | International Day against Drug Abuse and Illicit Trafficking |
| 26 June | United Nations International Day in Support of Victims of Torture |
| 27 June | Micro-, Small and Medium-sized Enterprises Day |
| 29 June | International Day of the Tropics |
| 30 June | International Asteroid Day |
| 30 June | International Day of Parliamentarism |
| **JULY** | |
| 6 July (first Saturday in July) | International Day of Cooperatives |
| 11 July | World Population Day |
| 15 July | World Youth Skills Day |
| 18 July | Nelson Mandela International Day |
| 28 July | World Hepatitis Day [WHO] |
| 30 July | International Day of Friendship |
| 30 July | World Day against Trafficking in Persons |
| **AUGUST** | |
| 9 August | International Day of the World's Indigenous Peoples |
| 12 August | International Youth Day |
| 19 August | World Humanitarian Day |
| 21 August | International Day of Remembrance and Tribute to the Victims of Terrorism |
| 22 August | International Day Commemorating the Victims of Acts of Violence Based on Religion or Belief |
| 23 August | International Day for the Remembrance of the Slave Trade and Its Abolition [UNESCO] |
| 29 August | International Day against Nuclear Tests |
| 30 August | International Day of the Victims of Enforced Disappearances |
| **SEPTEMBER** | |
| 5 September | International Day of Charity |
| 8 September | International Literacy Day |
| 10 September | World Suicide Prevention Day [WHO] |
| 12 September | United Nations Day for South-South Cooperation |
| 15 September | International Day of Democracy |
| 16 September | International Day for the Preservation of the Ozone Layer |
| 21 September | International Day of Peace |
| 23 September | International Day of Sign Languages |
| 26 September | International Day for the Total Elimination of Nuclear Weapons |
| 26 September (last Thursday of September) | World Maritime Day |
| 27 September | World Tourism Day |
| 28 September | International Day for Universal Access to Information [UNESCO] |
| 28 September | World Rabies Day [WHO] |
| 30 September | International Translation Day |
| **OCTOBER** | |
| 1 October | International Day of Older Persons |
| 2 October | International Day of Non-Violence |
| 5 October | World Teachers' Day [UNESCO] |
| 7 October (first Monday in October) | World Habitat Day |
| 9 October | World Post Day |
| 10 October | World Mental Health Day [WHO] |
| 11 October | International Day of the Girl Child |
| 12 October (second Saturday of October) | World Migratory Bird Day [UNEP] |
| 13 October | International Day for Disaster Risk Reduction |
| 15 October | International Day of Rural Women |
| 16 October | World Food Day [FAO] |
| 17 October | International Day for the Eradication of Poverty |
| 20 October (every five years, beginning in 2010) | World Statistics Day |
| 24 October | United Nations Day |
| 24 October | World Development Information Day |
| 27 October | World Day for Audiovisual Heritage |
| 31 October | World Cities Day |
| **NOVEMBER** | |
| 2 November | International Day to End Impunity for Crimes against Journalists |
| 5 November | World Tsunami Awareness Day |
| 6 November | International Day for Preventing the Exploitation of the Environment in War and Armed Conflict |
| 10 November | World Science Day for Peace and Development |
| 14 November | World Diabetes Day |
| 16 November | International Day for Tolerance |
| 17 November (third Sunday in November) | World Day of Remembrance for Road Traffic Victims |
| 19 November | World Toilet Day |
| 20 November | Africa Industrialization Day |
| 20 November | Universal Children's Day |
| 21 November | World Television Day |
| 21 November (third Thursday in November) | World Philosophy Day |
| 25 November | International Day for the Elimination of Violence against Women |
| 29 November | International Day of Solidarity with the Palestinian People |
| 30 November | Day of Remembrance for all Victims of Chemical Warfare |

| DECEMBER | |
|---|---|
| 1 December | World AIDS Day |
| 2 December | International Day for the Abolition of Slavery |
| 3 December | International Day of Persons with Disabilities |
| 5 December | International Volunteer Day for Economic and Social Development |
| 5 December | World Soil Day |
| 7 December | International Civil Aviation Day |
| 9 December | International Day of Commemoration and Dignity of the Victims of the Crime of Genocide and of the Prevention of this Crime |
| 9 December | International Anti-Corruption Day |
| 10 December | Human Rights Day |
| 11 December | International Mountain Day |
| 12 December | International Day of Neutrality |
| 12 December | International Universal Health Coverage Day |
| 18 December | International Migrants Day |
| 18 December | Arabic Language Day (Arabic) |
| 20 December | International Human Solidarity Day |

## INTERNATIONAL DECADES

| | |
|---|---|
| 1976–1985 | United Nations Decade for Women |
| 1994–2004 | Decade of the World's Indigenous People |
| 1997–2006 | UN Decade for the Eradication of Poverty |
| 2001–2010 | International Decade for a Culture of Peace and Non-violence for the Children of the World, recognized by the UN |
| 2003–2012 | United Nations Literacy Decade |
| 2005–2014 | United Nations Decade on Education for Sustainable Development |
| 2005–2015 | International decade for action 'Water For Life' |
| 2008–2017- | Second United Nations Decade for the Eradication of Poverty |
| 2010–2020- | United Nations Decade for deserts and fight against desertification |
| 2011–2020- | Third International Decade for the Eradication of Colonialism. |
| 2013–2022 | International Decade for the Rapprochement of Cultures |
| 2014–2024- | United Nations Decade of Sustainable Energy for All |
| 2015–2024- | International Decade for People of African Descent |
| 2018-2027 | Third United Nations Decade for the Eradication of Poverty |
| 2018–2028 | International Decade for Action "Water for Sustainable Development" |
| 2019-2028 | Nelson Mandela decade of peace |
| 2019–2028 | United Nations Decade of Family Farming |
| 2021–2030 | International Decade of Ocean Science for Sustainable Development |
| 2021-2030 | International Decade on ecosystem restoration |

The United Nations General Assembly has declared the decade 2021-30 as the decade dedicated to restore the ecosystems

- This will officially launch with the World Environment Day 2021, which will take place on June 5th
- This initiative is led by the United Nations Environment Programme and the Food and Agriculture Organization of the United Nations
- It aims for a sustainable future based on the ecosystems through communications, events and a dedicated web platform

### One Belt One Road

One Belt One Road (OBOR) is a Chinese initiative which aims to increase and expand economic development and commercial projects that focus on building on the connectivity and cooperation of countries to promote mutual trade. OBOR spans about 78 countries of the world. Italy has become the first developed economy of the world to sign OBOR in 2019. There are a total number of six projects under this initiative.

# WORLD INFORMATION

| | |
|---|---|
| The goddess of Peace | Pax |
| The goddess of Flowers | Flora |

## Famous Greek Gods & Goddesses

| | |
|---|---|
| The god of Sleep | Somus |
| The god of Love | Cupid |
| The god of the Sea | Neptune |
| The god of Medicine, Music, Punishment | Apollo |
| The god of Fire | Vulcan |
| The god of Heaven | Uranus |
| The god of Riches | Pluto's |
| The god of War | Mars |
| The goddess of Love | Venus |
| The goddess of Wisdom | Minerva |
| The goddess of Hunting | Diana |
| The goddess of Vegeance | Nemesis |
| The goddess of Justice | Astraea |
| The goddess of Chastity | Bona Dea |

## Famous Paintings

| Painting | Painter |
|---|---|
| Mona Lisa (also known as La Gioconda) | Leonardo Da Vinci |
| The Scream | Edvard Munch |
| Creation of Adam | Michelangelo |
| Sunflowers | Vincent Van Gogh |
| Ceci N'est pas une Pipe | Rene Magritte |
| Poppies in a Field | Claude Monet |
| The Last Supper | Leonardo Da Vinci |
| Dove of Peace | Picasso |
| Le Moulin de la Galette | Auguste Renoir |

## Signs and Symbols

| | |
|---|---|
| Red Triangle | Family Planning |
| Red Cross | Medical Aid |
| Red Light | Stop, Danger, Emergency |
| Green Light | Line Clear |
| Black Flag | Protest |
| Red Flag | Revolution |
| Lotus | Culture and Civilisation |
| Olive Branch | Peace |
| Dove | Peace |
| Pigeon | Peace |
| Socialist Maharaja | Air India |
| White Flag | Truth |
| Tricolour | National flag of India |
| Union Jack Stars & Stripes | National flag of UK |
| Old glory | National flag of USA Federation |
| Hammer & Sickle | National flag of Russian |

## Principal Languages of the World

| Language | Areas Where Spoken | Language | Areas Where Spoken |
|---|---|---|---|
| Chinese (Mandarin and Cantonese) | China | Slovak | Czechoslovakia |
| English | U.K., U.S.A., Canada, Ireland, Australia, New Zealand. | Armenian | Armenia |
| Russian | Russian Federation | Kazak | Kazakhstan |
| Spanish | Spain, Latin America | Tibetan | Tibet (China) |
| Hindi | North India | Ulghur | Sinkiang |
| Japanese | Japan | Twi | Ghana |
| German | Germany, Austria, Switzerland | Malinke | West Africa |
| Bengali | Bangladesh, India | Sotho | Lesotho (Africa) |
| Portuguese | Portugal, Brazil | Zulu | South Africa |
| Arabic | Middle East, North Africa | Xhosa | South Africa |
| French | France, Belgium, Canada, Switzerland | Lithuanian | Lithuania |
| Italian | Italy | Georgian | Georgia |
| Indonesian | Indonesia | Hebrew | Israel |
| Javanese | Java (Indonesia) | Santhali | Eastern India |
| Telgu | Andhra Pradesh (India) | Yi (Lolo) | China |
| Tamil | Sri Lanka, Tamilnadu (India) | Minangkabau | Somalia (Indonesia) |
| Marathi | Maharashtra (India) | Ilocano | Luzon |
| Urdu | Pakistan, India | Somali | Somalia (Philippines) |
| Punjabi | Pakistan, India | Mossi | Upper Volta |
| Korean | Korea (North and South) | Albanian | Albania |
| Ukrainian | Ukraine (Russian Federation) | Mongolian | Mongolia (China) |
| Vietnamese | Vietnam | Miao | China |
| Polish | Poland | Buginese | Celebes (Indonesia) |
| Turkish | Turkey | Kashmir | Kashmiri (India) |
| Gujarati | Gujarat (India) | Rajasthani | Rajasthan (India) |
| Thai | Thailand | Moldavian | Moldavia |
| Malayalam | Kerala (India) | Lao | Laos |
| Kannada | Karnataka (India) | Achinese | Sumatra (Indonesia) |
| Farsi (Persian) | Iran | Balinese | Bali (Indonesia) |
| Oriya | Orissa (India) | Bikolluzon | (Philippines) |
| Romanian | Rumania | Ganda | Uganda |
| Serbo-Croatian | Yugoslavia | Nyanja | Malawi, Zambia |
| Hausa | Nigeria, Niger | Mbunda | Angola |
| Pushto | Pakistan | Makua | Mozambique |
| Bhojpuri | Eastern India | Afrikans | South Africa |
| Sudanese | Sudan | Mayan | Mexico, Guatemala |
| Hungarian | Hungary | Guarani | Paraguay |
| Dutch | Netherlands | Latvian | Latvia |
| Swahili | East Africa | Stovenian | Yugoslavia |
| Visayen | Philippines | Mordvia | Mordavia |
| Nepali | Nepal | Chuvash | Chuvash |
| Greek | Greece | Tadzhik | Tadzhikistan |
| Cech | Czechoslovakia | Gondi | East India |
| Assamese | Assam (India) | Shan | Burma |
| Swedish | Sweden | Karen | Burma |
| Bulgarian | Bulgaria | Batak | Sumatra (Indonesia) |
| Byelorussian | Byelorussia, Russian Federation | Sidamo | Ethiopia |
| Sinhalese | Sri Lanka | Kikuyu | Kenya |
| Amharic | Ethiopia | Kongo | Congo |
| Yuruba | Nigeria | Luba | Congo |
| Madurese | Madura (Indonesia) | Bemba | Zambia |
| Ibo | Nigeria | Bhili | Gujarat (India) |
| Catalan | Spain | Berton | Britainy |
| Sindhi | Pakistan, India | Macedonia | Macedonia |
| Azerbaijani | Azerbaijan, Russian Federation | Estonian | Estonia |

| | | | |
|---|---|---|---|
| Chattigarhi | Bihar (India) | Bashkir | Bashkir |
| Fulani | West Africa | Turkmen | Turkmen |
| Magadhi | Bihar (India) | Kirgiz | Kirrgiz |
| Malagasy | Malgasy | Baluchi | Pakistan, Iran |
| Maithali | Bihar (India) | Dayak | Borneo (Indonesia) |
| Uzbek | Uzbekistan, Russian Federation | Tulu | Karnataka (India) |
| Malaya | Malaysia, Singapore | Wolof | Senegal |
| Chuang | China | Mende | Sierra Leone |
| Tagalog | Philippines | Ewe | Ghana, Togo |
| Cuechua | Peru, Bolivia | Fon | Dahomey |
| Danish | Denmark | Kanuri | West Africa |
| Flemish | Belgium | Feng | Gabon, Cameroon |
| Provencal | France | Drinka | Sudan |
| Tartar | Tartar | Lingla | Congo |
| Kurdish | Tukey, Iraq, Russian Federation | Mangbet | Congo |
| Khmer | Kampuchea Iran, (Russian Federation) | Rundi | Burundi, Congo |
| Ruanda | Ruanda, Congo | Kamba | Kenya |
| Galla | Ethopia | Luo | Kenya |
| Norwegian | Norway | Sukania | Tanzania |
| Marwari | Rajasthan (India) | Tigrinya | Ethopia |
| Finnish | Finland | Shona | Rhodesia |
| Yiddish | USA, Israel | Tswana | Botswana, South Africa |

# National Days of Some Countries

## January

| | | |
|---|---|---|
| 1st | Sudan | Independence Day |
| 2nd | Cuba | Liberation Day |
| 4th | Burma | Independence Day |
| 25th | Uganda | Revolution Day |
| 26th | Australia | Day (Landing of the First Fleet) |
| 26th | India | Republic Day |

## February

| | | |
|---|---|---|
| 6th | New Zealand | New Zealand Day |
| 22nd | Egypt | National Day |

## March

| | | |
|---|---|---|
| 3rd | Morocco | National Day |
| 6th | Ghana | National Day |
| 11th | Denmark | King's Birthday |
| 12th | Mauritius | Independence Day |
| 17th | Ireland | National Day |
| 22nd | Arab League | Foundation Day |
| 23rd | Pakistan | Pakistan Day |
| 25th | Greece | Independence Day |

## April

| | | |
|---|---|---|
| 4th | Hungary | Liberation Day |
| 4th | Senegal | Independence Day |
| 21st | Britain | The Queen's Day |
| 27th | Togo | Independence Day |
| 27th | Sierra Leone | Independence Day |
| 29th | Japan | Emperor Birthday |
| 30th | The Netherlands | Queen's Birthday. |

## May

| | | |
|---|---|---|
| 2nd | Israel | Independence Day--date variable |
| 9th | Czechoslovakia | National Day |
| 17th | Norway | National Day |
| 22nd | Sri Lanka | National Day |
| 22nd | Guyana | National Day |
| 23rd | FRG | Constitution Day |
| 25th | Sudan | National Day |
| 25th | Jordan | National Day |
| 27th | Afghanistan | Independence Day |

## June

| | | |
|---|---|---|
| 2nd | Italy | Foundation of Republic Day |
| 6th | Sweden | Flag Day |
| 9th | Britain | Queen's Official Birthday variable date |
| 12th | The Philippines | Proclamation of Independence Day |
| 24th | Thailand | National Day |
| 26th | Malagasy | Independence Day |

## July

| | | |
|---|---|---|
| 1st | Somalia | Independence Day |
| 1st | Canada | Confederation Day |
| 3rd | Algeria | Independence Day |
| 4th | Philippines | Independence Day |
| 4th | U.S.A. | Independence Day |
| 6th | Malawi | Independence Day |
| 11th | Mongolia | People's Revolution Day |
| 12th | Belgium | National Day |
| 14th | France | Taking of Bastille |
| 17th | Afghanistan | National Day |
| 18th | Spain | National Day |
| 22nd | Poland | National Day |
| 23rd | Egypt | National Day |
| 26th | Liberia | Independence Day |
| 28th | Peru | National Day |

## August

| | | |
|---|---|---|
| 1st | Switzerland | National Day |
| 7th | Ivory Coast | Republic Day |
| 9th | Singapore | National Day |
| 14th | Pakistan | Independence Day |

| | | |
|---|---|---|
| 15th | India | Independence Day |
| 15th | Korea (S) | Independence Day |
| 17th | Indonesia | Independence Day |
| 23rd | Romania | Liberation Day |
| 25th | Uruguay | National Day |
| 31st | Malaysia | Independence Day |
| 31st | Trinidad | Independence Day |
| 31st | Tobago | Independence Day |

## September

| | | |
|---|---|---|
| 1st | Libya | National Day |
| 2nd | Vietnam | Independence Day |
| 3rd | Qatar | National Day |
| 6th | Switzerland | Independence Day |
| 7th | Brazil | National Day |
| 8th | North Korea | Liberation Day |
| 9th | Bulgaria | Liberation Day |
| 13th | Ethiopia | National Day |
| 16th | Mexico | Independence Day |
| 16th | Papua | New Guinea (National Day) |
| 18th | Chile | National Day |
| 21st | Malta | Independence Day |
| 22nd | Mali | Independence Day |
| 23rd | Saudi Arabia | National Day |

## October

| | | |
|---|---|---|
| 1st | China | Foundation of People's Republic of China |
| 1st | Sam Marino | National Day |
| 1st | Nigeria | Independence Day |
| 3rd | Korea (S) | Liberation Day |
| 7th | E. Germany | Liberation Day(GDR) |
| 9th | Uganda | Liberation Day |
| 10th | Taiwan | National Day |
| 12th | Spain | Hispanity Day |
| 21st | Somalia | Revolution Day |
| 24th | U.N.O. | Foundation Day |
| 24th | Zambia | National Day |
| 26th | Austria | National Day |
| 29th | Turkey | Republic Day |

## November

| | | |
|---|---|---|
| 1st | Algeria | National Day |
| 7th | Russian | Anniversary of the Federation |
| 11th | Sweden | King's Birthday |
| 11th | Angola | Independence Day |
| 12th | Saudi Arabia | National Day |
| 18th | Morocco | Throne pay |
| 22nd | Lebanon | Independence Day |
| 24th | Zaire | National Day |
| 25th | Surinam | National Day |
| 26th | Mongolia | Independence Day |
| 29th | Yugoslavia | Republic Day |
| 30th | Yemen DPRY | National Day |

## December

| | | |
|---|---|---|
| 1st | Cent-African | National Day Empire |
| 2nd | Yemen | National Day |
| 2nd | Laos | Liberation Day |
| 5th | Thailand | King's Day |
| 6th | Finland | Independence Day |
| 9th | Tanzania | Independence Day |
| 11th | Upper Volta | Republic Day |
| 11th | Zanzibar | Independence Day |
| 12th | Kenya | Independence Day |
| 16th | Bangladesh | Independence Day |
| 18th | Niger | Republic Day |
| 24th | Libya | Independence Day |
| 29th | Nepal | King's Birthday |

## Different words for 'King' in different languages

| Language | Word for 'King' |
|---|---|
| Croatian | Kralj |
| Czech | Kral |
| Danish | Konge |
| Dutch | Koning |
| Estonian | Kuningas |
| French | Roi |
| Irish | Ri |

## Modern Slavery Bill 2018

The Modern Slavery Act 2018 requires entities based, or operating, in Australia, which have an annual consolidated revenue of more than $100 million, to report annually on the risks of modern slavery in their operations and supply chains, and actions to address those risks.

## List of Presidents of the United States of America

| Sr.no | President | Period | Vice President | Affiliation |
|---|---|---|---|---|
| 1 | George Washington | 1789-1797 | John Adams | None |
| 2 | John Adams | 1797-1801 | Thomas Jefferson | Federalist |
| 3 | Thomas Jefferson | 1801-1809 | Aaron Burr (1801-05)<br>George Clinton (1805-09) | Democratic- Republican |
| 4 | James Madison | 1809-1817 | George Clinton (1809-12)<br>Elbridge Gerry (1813-14) | Democratic- Republican |
| 5 | James Monroe | 1817-1825 | Daniel D. Tompkins | Democratic- Republican |
| 6 | John Quincy Adams | 1825-1829 | John C. Calhoun | National- Republican |

| | | | | |
|---|---|---|---|---|
| 7 | Andrew Jackson | 1829-1837 | John C. Calhoun (1829-32)<br>Martin Van Buren (1833-37) | Democrat |
| 8 | Martin Van Buren | 1837-1841 | Richard M. Johnson | Democrat |
| 9 | William H. Harrison | 1841 | John Tyler | Whig |
| 10 | John Tyler | 1841-1845 | vacant | Whig |
| 11 | James K. Polk | 1845-1849 | George M. Dallas | Democrat |
| 12 | Zachary Taylor | 1849-1850 | Millard Fillmore | Whig |
| 13 | Millard Fillmore | 1850-1853 | vacant | Whig |
| 14 | Franklin Pierce | 1853-1857 | William R.D. King | Democrat |
| 15 | James Buchanan | 1857-1861 | John C. Breckinridge | Democrat |
| 16 | Abraham Lincoln | 1861-1865 | Hannibal Hamlin (1861-65)<br>Andrew Johnson (1865) | National Union (Republican) |
| 17 | Andrew Johnson | 1865-1869 | vacant | National Union (Democrat) |
| 18 | Ulysses S. Grant | 1869-1877 | Schuyler Colfax (1869-73)<br>Henry Wilson (1873-75) | Republican |
| 19 | Rutherford B. Hayes | 1877-1881 | William A. Wheeler | Republican |
| 20 | James A. Garfield | 1881 | Chester A. Arthur | Republican |
| 21 | Chester A. Arthur | 1881-1885 | vacant | Republican |
| 22 | Grover Cleveland | 1885-1889 | Thomas A. Hendricks (1885) | Democrat |
| 23 | Benjamin Harrison | 1889-1893 | Levi P. Morton | Republican |
| 24 | Grover Cleveland | 1893-1897 | Adlai E. Stevenson | Democrat |
| 25 | William McKinley | 1897-1901 | Garret A. Hobart (1897-99)<br>Theodore Roosevelt (1901) | Republican |
| 26 | Theodore Roosevelt | 1901-1909 | vacant (1901-05)<br>Charles W. Fairbanks (1905-09) | Republican |
| 27 | William Howard Taft | 1909-1913 | James S. Sherman (1909-12) | Republican |
| 28 | Woodrow Wilson | 1913-1921 | Thomas R. Marshall | Democrat |
| 29 | Warren G Harding | 1921-1923 | Calvin Coolidge | Republican |
| 30 | Calvin Coolidge | 1923-1929 | vacant (1923-25)<br>Charles G. Dawes (1925-29) | Republican |
| 31 | Herbert Hoover | 1929-1933 | Charles Curtis | Republican |
| 32 | Franklin D. Roosevelt | 1933-1945 | John N. Garner (1933-41)<br>Henry A. Wallace (1941-45)<br>Harry S. Truman (1945) | Democrat |
| 33 | Harry S. Truman | 1945-1953 | vacant (1945-49)<br>Alben W. Barkley (1949-53) | Democrat |
| 34 | Dwight D. Eisenhower | 1953-1961 | Richard M. Nixon | Republican |
| 35 | John F Kennedy | 1961-1963 | Lyndon B. Johnson | Democrat |
| 36 | Lyndon B. Johnson | 1963-1969 | vacant (1963-65)<br>Hubert H. Humphrey (1965-69) | Democrat |
| 37 | Richard M. Nixon | 1969-1974 | Spiro T. Agnew (1969-73)<br>Gerald R. Ford (1973-74)(d) | Republican |
| 38 | Gerald R. Ford | 1974-1977 | Nelson A. Rockefeller (d) | Republican |
| 39 | James Earl Carter | 1977-1981 | Walter Mondale | Democrat |
| 40 | Ronald Reagan | 1981-1989 | George H.W. Bush | Republican |
| 41 | George H.W. Bush | 1989-1993 | J. Danforth Quayle | Republican |
| 42 | William J. Clinton | 1993-2001 | Albert Gore Jr. | Democrat |
| 43 | George W. Bush | 2001-2009 | Dick Cheney | Republican |
| 44 | Barack H. Obama | 2009-2017 | Joe Biden | Democrat |
| 45 | Donald J. Trump | 2017-2021 | Mike Pence | Republican |
| 46. | Joe Biden | 2021 | Kamala Harris | Democrat |

## Important Streets and Reasons They are Famous for

| Street Name | Reason they are famous |
|---|---|
| Wall street, New York | Stock Exchange and financial centre of the world. |
| Fifth Avenue, New York | Also Known as Millionaire Row, famous for big stores like Apple. |
| 10 Downing street, London | Government Offices and PM house. |
| Champ Elysees, Paris | Theaters , Stores, Bars and Restaurants |
| Harley Street, London | Doctors. |
| Silicon Valley, California | Office of Global technology companies (Apple & Facebook) |

## Famous Travelers in History

### 1. Marco Polo

The Venetian merchant traveler whose famous work 'Travels of Marco Polo' recorded his epic travels and introduced the

Europeans to the cultures of South Asia! Setting off with his father and uncle at the age of 17, Marco travelled through various kingdoms and wastelands for 24 years before he returned to Venice and documented his travels

## 2. John Cabot

John Cabot or Giovanni Caboto as he's fondly referred to in Italy, is famed for being the first European explorer to claim contact with the North American inhabitants. Supposedly, he landed on the island of Newfoundland in 1497 and led three expeditions to the American mainland, the success of which is still held in question by many exploration researchers.

## 3. Christopher Columbus

Famous for being the discoverer of America, Christopher Columbus was an Italian explorer, navigator and colonizer citizen of Genoa. Under the aegis of the monarchy of Spain, this man completed four long and arduous voyages across the world. In his last voyage on the seas and in a bid to discover India and the Japanese, he strayed away and landed in what is present day America. Although not the first one to land in America, his voyage had a lasting European influence on the continent. Ambitious and determined, this explorer's four voyages are a testament to his will and spirit that has inspired travelers all across.

## 4. Ibn Battuta

Generally considered to be the greatest travelers of all times, Ibn Battuta was a Moroccan explorer who is famous for his travel account called 'Rihala'. Battuta travelled through the Horn of Africa, the Middle East, South Asia and finally China for over forty years. It's said that after he returned to Morocco more than a quarter of a century later, he had lost half his family. His comprehensive accounts of the places visited have guided historians as well as future travelers alike.

## 5. Amerigo Vespucci

This explorer discovered the new world of America along with Brazil and established them as large landmasses which had nothing to do with Asia. His four voyages spread across 5 years make him a legendary traveler that you should know of.

## 6. Xuanzang (Hsuan Tsang)

Chinese monk, scholar, and a famed translator, Xuanzang is famous in South Asian history as the traveler who brought the great Indian and Chinese cultures in contact with each other. His claim to fame is the 17 year overland journey from China to the many kingdoms of the Indian subcontinent he took. This journey is supposedly the inspiration behind the novel "Journeys to the West", written by Wu Cheng'en. Like all great souls, it's rumoured that Xuanzang had a dream that convinced him to visit India. Following his heart, he covered an overland journey which made him one of the most famous travelers of history.

## 7. Ferdinand Magellan

This bold traveler and intrepid explorer from Portugal was behind the East Indies expeditions which finally inspired the first total circumnavigation of the globe. His voyages, which took him across the mighty Pacific paved way for further expeditions. The famous 'Straits of Magellan' is named after this voyager.

## 8. Bartolomeu Dias

A Portuguese explorer, Dias was the first among all the explorers of his age to undertake the arduous voyage across the African continent and the first to touch the Southern most tip. Although he wanted to sail to India, his crew revolted and he had to sail back, incidentally discovering the Cape of Good Hope!

## 9. Jacques Cartier

Cartier was a very respected mariner who undertook the first European voyage to the far undiscovered land, what we now know as Canada! He was the first European to map the Canadian landmass while also bringing along the French language, which to this day remains Canada's second language.

## 10. Herodotus

Popularly known as the 'Father of History', this Greek historian, Heroditus, was one of the most travelled people of his age. His accounts give insights as he travels through Asia Minor, Greece, Rome and Egypt.

## 11. Vasco De Gama

A Portuguese traveler and explorer, Vasco De Gama was the first to reach the Indian shores, linking the Indian subcontinent with Europe by the sea route. A daunting voyage, his discovery of the sea route meant that the Europeans didn't have to cross the Arabian Peninsula or the treacherous Mediterranean in order to spread out their empires. Gama opened up the 'Spice Route' when he landed in Calicut and established first contact with the golden Indian shore lands.

## 12. Captain James Cook

Captain Cook was an explorer, navigator, cartographer and a captain in the Royal Navy. His voyages led to the discovery of the East coast of Australia and Hawaii. As a sailor who saw action in the seven years' war, Cook sailed thousands of miles across largely uncharted territory of the globe and mapped islands from New Zealand to Hawaii.

## Stock Exchanges in the World

| Stock Exchange | Country |
|---|---|
| New York Stock Exchange | USA |
| NASDAQ | USA |
| Tokyo Stock Exchange | Japan |
| Shanghai Stock Exchange | China |
| Hong Kong Stock Exchange | Hong Kong |
| London Stock Exchange | Britain |
| Euronext | European Union |
| Shenzhen Stock Exchange | China |
| Toronto Stock Exchange | Canada |
| Deutsche Boerse | Germany |
| Pakistan Stock Exchange(PSX) | Pakistan |
| Bombay Stock Exchange (BSE/SENSEX) | India |

## Refugee Camps in the World

1. Kutupalong in Cox's Bazar, Bangladesh
2. Bidi Bidi in Northwestern Uganda
3. Dadaab Refugee Complex, Kenya
4. Kakuma in Northwestern Kenya
5. Nyarugusu in Kigoma, Tanzania
6. Jabalia, North of Gaza City on the Gaza Strip
7. Zaatari in Northern Jordan
8. Yida in South Sudan
9. Katumba in Tanzania
10. Pugnido in Western Ethiopia

## Famous Dances around the World

| Dance Name | Country |
|---|---|
| Haka | New Zealand war dance |
| Ote'a | Tahiti traditional dance |
| Bharata Natyam | Classical Indian dance |
| Zaouli | Ivory Coast, no women are allowed when this dance is performed. It is a cultural dance |
| Aigus | Kenya and Tanzania. Traditional African dance. It os a competitive jumping dance |
| Hopak | Ukraine, Dance of Victory |
| Viennese Waltz | Classic ballroom dance |
| Dragon Dance | China, traditional dance performed during festivals |
| Flamenco | Spain, performed on the beat of guitar |
| Samba | Brazil, popular dance of Rio Carnival |
| Kathak | India |
| Bhangra | Pakistan/India |
| Jhumar | Pakistan |
| Khattak Dance | Pakistan |

## List of World's Famous Squares

| Square Name | Country |
|---|---|
| Red Square | Russia (Moscow) |
| Tiananmen Square | China (Beijing) |
| St Peter's Square | Vatican City |
| Zocalo | Mexico (Mexico City) |
| Times Square | USA (New York) |
| Tahrir Square | Egypt (Cairo) |
| Taksim Square | Turkey (Istanbul) |
| Marjeh Square | Syria (Damascus) |
| Shah Square | Iran (Isfahan) |
| Lan Kwai Fong | Hong Kong |
| Dam Square | Netherlands (Amsterdam) |
| Trafalgar Square | UK (London) |

## List of World's Famous Towers

| Tower Name | Location |
|---|---|
| Eiffel Tower | France, Paris |
| Burj Khalifa | UAE, Dubai |
| Pisa Tower | Italy, Pisa |
| Big Ben | London, England |
| CN Tower | Canada, Toronto |
| Qutb Minar | India, Delhi |
| Three Pagodas | China, Dali |
| Petronas | Malaysia, Kuala Lumpur |
| Empire State Building | USA, New York |
| The Shard | England, London |
| Space Needle | USA, Washington |
| Canton Tower | China, Guangzhou |
| Minaret of Jam | Afghanistan, Shahrak |
| One World Trade Centre | USA, New York |

## Famous Cultural and Historical Sites

| | |
|---|---|
| Katas Raj Temples | Kalar Kahar, District Chakwal |
| Masjid e Tooba | Karachi |
| Gurdwara Darbar Sahib Kartarpur Shakargarh | District Narowal |
| Kargah Buddha Shukogah | Nopura, Gilgit |
| Shahi Qila | Lahore |
| Badshahi Masjid | Lahore |

# WHO IS WHO IN THE WORLD

## HEADS OF STATES, PRESIDENTS, PRIME MINISTERS

| | |
|---|---|
| **Islamic Republic of Afghanistan** | President: Hibatullah Akhundzada<br>Acting Prime Minister: Abdul Kabir |
| **People's Democratic Republic of Algeria** | President: Abdelmadjid Tebboune<br>Prime Minister: Aymen Benabderrahmane |
| **Argentine Republic** | President: Alberto Fernández |
| **Australia** | Sovereign: King – Charles III<br>Governor General: David Hurley<br>Prime Minister: Anthony Albanese |
| **Republic of Austria** | President: Alexander Van der Bellen<br>Federal Chancellor: Karl Nehammer |
| **Republic of Azerbaijan** | President: Ilham Aliyev<br>Prime Minister: Ali Asadov |
| **Kingdom of Bahrain** | King: Sheikh Hamad bin Isa al-Khalifa<br>Prime Minister: Prince Salman bin Hamad Al Khalifa |
| **People's Republic of Bangladesh** | President: Mohammed Shahabuddin<br>Prime Minister: Sheikh Hasina |
| **Kingdom of Belgium** | King: Philippe<br>Prime Minister: Alexander De Croo |
| **Kingdom of Bhutan** | King: Jigme Khesar Namgyel Wangchuck<br>Prime Minister: Lotay Tshering |
| **Bosnia Herzegovina** | Chairman of Presidency:<br>Željka Cvijanović (Incumbent)<br>Chairman of the Council of Minister:<br>Borjana Krišto |
| **Federative Republic of Brazil** | President: Luiz Inácio Lula da Silva |
| **Brunei Darussalam** | Sultan and Prime Minister: Haji Hassanal Bolkiah |
| **Republic of Bulgaria** | President: Rumen Radev<br>Prime Minister: Nikolai Denkov |
| **Kingdom of Cambodia** | King: Norodom Sihamoni<br>Prime Minister: Hun Sen |
| **Canada** | Sovereign: King – Charles III<br>Governor-General: Mary Simon<br>Prime Minister: Justin Trudeau |
| **Republic of Chad** | Interim President – Mahamat Déby<br>Prime Minister – Saleh Kebzabo |
| **Republic of Chile** | President: Gabriel Boric |
| **People's Republic of China** | President: Xi Jinping<br>Prime Minister: Li Keqiang |
| **Republic of Colombia** | President: Gustavo Petro |
| **Republic of Cuba** | President: Miguel Díaz-Canel<br>Prime Minister: Manuel Marrero Cruz |
| **Czech Republic** | President: Petr Pavel<br>Prime minister: Petr Fiala |
| **Kingdom of Denmark** | Sovereign: Queen Margrethe II<br>Prime Minister: Mette Frederiksen |
| **Republic of Djibouti** | President: Ismail Omar Guelleh<br>Prime Minister: Abdoulkader Kamil Mohammed |
| **Arab Republic of Egypt** | President: Abdel Fattah el-Sisi<br>Prime Minister: Moustafa Madbouly |
| **State of Eritrea** | President: Isaias Afwerki |
| **Republic of Finland** | President: Sauli Niinistö<br>Prime Minister: Petteri Orpo |
| **Federal Republic of Germany** | President: Frank – Frank Walter Steinmeier<br>Chancellor: Olaf Scholz |
| **Republic of Hungary** | President: Katalin Novák<br>Prime Minister: Viktor Orbán |
| **Republic of India** | President: Droupadi Murmu<br>Prime Minister: Narendra Modi |
| **Republic of Indonesia** | President: Joko Widodo |
| **Islamic Republic of Iran** | Supreme Leader: Ali Khamenei<br>President: Ebrahim Raisi |
| **Republic of Iraq** | President: Abdul Latif Rashid<br>Prime Minister: Mohammed Shia' Al Sudani |
| **State of Israel** | President: Isaac Hevzog<br>Prime Minister: Benjamin Netanyahu |
| **Italian Republic** | President: Sergio Mattarella<br>Prime Ministers: Giorgia Meloni |
| **Japan** | Emperor: Naruhito<br>Prime Minister: Fumio Kishida |
| **The Hashemite Kingdom of Jordan** | Ruler: King Abdullah II<br>Prime Minister: Bisher Al-Khasawneh |

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|---|---|
| Republic of Kazakhstan | Chairman of the Security Council: Nursultan Nazarbayev<br>President: Kassym-Jomart Tokayev<br>Prime Minister: Alihan Smaiylov |
| Republic of Kenya | President: William Ruto<br>Prime Cabinet Secretary: Musalia Mudavadi |
| Democratic People's Republic of Korea (North Korea) | Head of State: Kim Jong-Un<br>Prime Minister: Kim Tok-hun |
| The Republic of Korea (South Korea) | President: Yoon Suk-yeol<br>Prime Minister: Han Duck-soo |
| State of Kuwait | Emir: Sheikh Nawaf Al-Ahmad Al-Jaber Al-Sabah<br>Prime Minister: Sheikh Ahmad Nawaf Al-Ahmad Al-Sabah |
| The Kyrgyz Republic | President elect: Sadyr Japarov<br>Chairman of the Cabinet of Ministers – Akylbek Japarov |
| Republic of Lebanon | Acting President – Michel Aoun<br>President of the Council of Ministers: Najib Mikati |
| Libya | Chairman of the Presidential Council: Mohamed–Al- Menfi<br>Prime Minister: Abdul Hamid Dbeibeh |
| Malaysia | Head of State: Yang di-Pertuan Agong - Abdullah Sultan Ahmad Shah<br>Prime Minister: Anwar Ibrahim |
| Republic of Maldives | President: Ibrahim Mohamed Solih |
| United Mexican States (Maxico) | Official Name: Estados Unidos Mexicanos<br>President: Andrés Manuel López Obrador |
| Mongolia | President: Ukhnaagiin Khurelsükh<br>Prime Minister: Luvsannamsrain Oyun Erdene |
| Kingdom of Morocco | Ruler: King Mohammed VI<br>President of the Government: Aziz Akhannouch |
| Union of Myanmar | Acting President – Myint Swe<br>Chairman of the State Administration Council – Min Aung Hlaing |
| | Prime Minister– Min Aung Hlaing |
| Federal Democratic Republic of Nepal | President: Ram Chandra Poudel<br>Prime Minister: Pushpa Kamal Dahal |
| Kingdom of the Netherlands | Sovereign: Willem Alexander<br>Prime Minister: Mark Rutte |
| New Zealand | Sovereign: King – Charles III<br>Governor-General: Dame Cindy Kiro |
| | Prime Minister: Chris Hipkins |
| Republic of Niger | Président: Abdourahamane Tchiani<br>Prime Minister: Ali Lamine Zeine |
| Federal Republic of Nigeria | President: Muhammadu Buhari<br>President-elect – Bola Tinubu |
| Kingdom of Norway | Sovereign: King Harald V<br>Prime Minister: Jonas Gahr Støre |
| Sultanate of Oman | Sultan and Prime Minister: Haitham bin Tariq |
| Islamic Republic of Pakistan | President: Arif Alvi<br>Prime Minister: Anwar-ul-Haq Kakar |
| Palestine | President: Mahmoud Abbas<br>Prime Minister: Mohammad Shtayyeh |
| Republic of the Philippines | President: Bongbong Marcos |
| Republic of Poland | President: Andrzej Duda<br>Prime Minister: Mateusz Morawiecki |
| Portuguese Republic | President: Marcelo Rebelo de Sousa<br>Prime Minister: Antonio Costa |
| State of Qatar | Emir: Sheikh Tamim bin Hamad Al Tha<br>Prime Minister: Sheikh Mohammed b<br>Abdul rahman bin Jassim Al Thani |
| Romania | President: Klaus Iohannis<br>Prime Minister: Marcel Ciolacu |
| Russian Federation | President: Vladimir Putin<br>Prime Minister: Mikhail Mishustin |
| Kingdom of Saudi Arabia | Sovereign: King Salman<br>Prime Minister – Mohammed bin Sa |
| Republic of Senegal | President: Macky Sall<br>Prime Minister – Amadou Ba |
| Somalia | President: Hassan Sheikh Mohamud<br>Prime Minister: Hamza Abdi Barre |
| Republic of Singapore | President: Halima Yacob<br>Prime Minister: Lee Hsien Loong |
| Republic of South Africa | President: Cyril Ramaphosa |
| Kingdom of Spain | Ruler: King - Felipe VI<br>President of the Government: Pedr Sánchez |
| Democratic Socialist Republic of Sri Lanka | President: Ranil Wickremesinghe<br>Prime Minister: Dinesh Gunawarde |
| Republic of the Sudan | Chairman of the Transitional Sove Council: Abdel Fattah al-Burhan<br>Acting Prime Minister: Osman Hu |
| Republic of South Sudan | President: Salva Kiir Mayardit |

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| Kingdom of Sweden | Sovereign: King Carl XVI Gustaf<br>Prime Minister: Ulf Kristersson |
| Syrian Arab Republic | President: Bashar al-Assad<br>Prime Minister: Hussein Arnous |
| Republic of Tajikistan | President: Emomali Rahmon<br>Prime Minister: Kokhir Rasulzoda |
| Kingdom of Thailand | King: Maha Vajiralongkorn<br>Prime Minister: Srettha Thavisin |
| Tunisian Republic | President: Kaïs Saïed<br>Prime Minister: Ahmed Hachani |
| Republic of Turkey | President: Recep Tayyip Erdoğan |
| Turkmenistan | President: Gurbanguly Berdimuhamedow |
| Ukraine | President: Volodymyr Zelensky<br>Prime Minister: Denys Shmyhal |
| UAE | President: Sheikh Khalifa bin Zayed Al Nahyan<br>Prime Minister: Sheikh Mohammad bin Rashid al-Maktoum |
| The United States of America | President: Joe Biden |
| Republic of Uzbekistan | President: Shavkat Mirziyoyev<br>Prime Minister: Abdulla Aripov |
| Socialist Republic of Vietnam | General Secretary of the Communist Party: Nguyễn Phú Trọng<br>President: Võ Văn Thưởng<br>Prime Minister: Phạm Minh Chính |
| Yemen | President: Mahdi al-Mashat<br>Prime Minister: Maeen Abdulmalik Saeed<br>Chairman of the Presidential Leadership Council: Rashad al-Alimi |
| Republic of Zimbabwe | President: Emmerson Mnangagwa |
| Greece | President: Katerina Sakellaropoulou |
| | Prime Minister: Kyriakos Mitsotakis |
| Republic of IRAQ | President – Abdul Latif Rashid<br>Prime Minister: M. Shia' Al Sudani |
| United Kingdom | Prime Minister: Rishi Sunak |

## Foreign Ministers of Some Selected Countries of the World

| Country | Name | Since |
|---|---|---|
| Afghanistan | Amir Khan Muttaqi (Acting) | 7 September 2021 |
| Albania | Olta Xhaçka[1] | 31 December 2020 |
| Algeria | Ahmed Attaf[2] | 18 March 2023 |
| Andorra | Imma Tor Faus | 17 May 2023 |
| Angola | Tete António[4] | 20 April 2020 |
| Antigua and Barbuda | E.P. Chet Greene | 21 March 2018 |
| Argentina | Santiago Cafiero[5] | 20 September 2021 |
| Armenia | Ararat Mirzoyan[6] | 19 August 2021 |
| Australia | Penny Wong[7] | 23 May 2022 |
| Austria | Alexander Schallenberg | 6 December 2021 |
| Azerbaijan | Jeyhun Bayramov[8] | 16 July 2020 |
| Bahamas | Fred Mitchell[9] | 20 Septem |



Bahrain
Banglades
Barbados
Belarus
Belgium
Belize
Benin
Bhutan
Bolivia
Bosnia a
Botswan
Brazil
Brunei

Bulgaria
Burkina
Burund
Cambo
Camero
Canada
Cape V
Centra
Chad
Chile
China
Colom
Como
Congo
the
Repub
Costa
Croat
Cuba
Cypru
Czech
Denn
Djibo
Dom
Dom
Ecua
Égyp
El Sa
Equa
Eritr
Esto
Esw
Ethi
Fiji
Finl

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|---|---|---|
| Bahrain | Abdullatif bin Rashid Al Zayani[10] | 11 February 2020 |
| Bangladesh | AK Abdul Momen[12] | 6 January 2019 |
| Barbados | Kerrie D. Symmonds[13] | 26 October 2022 |
| Belarus | Sergei Aleinik | 13 December 2022 |
| Belgium | Hadja Lahbib[14] | 15 July 2022 |
| Belize | Eamon Courtenay | 13 November 2020 |
| Benin | Shegun Adjadi Bakari | 6 June 2023 |
| Bhutan | Tandi Dorji[16] | 7 November 2018 |
| Bolivia | Rogelio Mayta[17] | 9 November 2020 |
| Bosnia and Herzegovina | Elmedin Konaković | 25 January 2023 |
| Botswana | Lemogang Kwape | 26 August 2020 |
| Brazil | Mauro Vieira | 1 January 2023 |
| Brunei | Hassanal Bolkiah (monarch) (Minister of Foreign Affairs) | 22 October 2015 |
| | Erywan Yusof (Second Minister of Foreign Affairs) | 31 January 2018 |
| Bulgaria | Mariya Gabriel | 6 June 2023 |
| Burkina Faso | Olivia Rouamba | 5 March 2022 |
| Burundi | Albert Shingiro[19] | 28 June 2020 |
| Cambodia | Prak Sokhon[20] | 5 April 2016 |
| Cameroon | Lejeune Mbella Mbella | 2 October 2015 |
| Canada | Mélanie Joly[21] | 26 October 2021 |
| Cape Verde | Rui Alberto de Figueiredo Soares | 14 January 2021 |
| Central African Republic | Sylvie Baïpo-Temon[22] | 14 December 2018 |
| Chad | Mahamat Zene Cherif[23] | 2 May 2021 |
| Chile | Antonia Urrejola[24] | 11 March 2022 |
| China | Qin Gang | 30 December 2022 |
| Colombia | Álvaro Leyva | 7 August 2022 |
| Comoros | Dhoihir Dhoulkamal | 28 September 2020 |
| Congo, Democratic Republic of the | Christophe Lutundula | 27 April 2021 |
| Republic of the Congo | Jean-Claude Gakosso[25] | 10 August 2015 |
| Costa Rica | Arnoldo André Tinoco[26] | 8 May 2022 |
| Croatia | Gordan Grlić-Radman[27] | 19 July 2019 |
| Cuba | Bruno Rodríguez Parrilla | 2 March 2009 |
| Cyprus | Kostantinos Kombos[28] | 1 March 2023 |
| Czech Republic | Jan Lipavský[29] | 17 December 2021 |
| Denmark | Lars Løkke Rasmussen[30] | 15 December 2022 |
| Djibouti | Mahamoud Ali Youssouf | 22 May 2005 |
| Dominica | Vince Henderson | 13 December 2022 |
| Dominican Republic | Roberto Álvarez Gil | 16 August 2020 |
| Ecuador | Gustavo Manrique[31] | 2 April 2023 |
| Egypt | Sameh Shoukry | 17 June 2014 |
| El Salvador | Alexandra Hill Tinoco[32] | 1 June 2019 |
| Equatorial Guinea | Simeón Oyono Esono Angüe [es] | 6 February 2018 |
| Eritrea | Osman Saleh Mohammed[33] | 18 April 2007 |
| Estonia | Margus Tsahkna[34] | 17 April 2023 |
| Eswatini | Thuli Dladla | 2 November 2018 |
| Ethiopia | Demeke Mekonnen | 8 November 2020 |
| Fiji | Sitiveni Rabuka (prime minister) | 24 December 2022 |
| Finland | Elina Valtonen | 20 June 2023 |

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|---|---|---|
| France | Catherine Colonna[36] | 20 May 2022 |
| Gabon | Michael Moussa Adamo | 8 March 2022 |
| Gambia | Mamadou Tangara | 29 June 2018 |
| Georgia | Ilia Darchiashvili | 4 April 2022 |
| Germany | Annalena Baerbock | 8 December 2021 |
| Ghana | Shirley Ayorkor Botchway | 27 January 2017 |
| Greece | Giorgos Gerapetritis | 27 June 2023 |
| Grenada | Joseph Andall | 30 June 2022 |
| Guatemala | Mario Búcaro | 1 February 2022 |
| Guinea | Morissanda Kouyaté | 25 October 2021 |
| Guinea-Bissau | Suzi Barbosa | 2 March 2020 |
| Guyana | Hugh Todd | 5 August 2020 |
| Haiti | Jean Victor Généus | 24 November 2021 |
| Holy See | Archbishop Paul Gallagher | 8 November 2014 |
| Honduras | Eduardo Enrique Reina [es] | 27 January 2022 |
| Hungary | Péter Szijjártó | 23 September 2014 |
| Iceland | Þórdís Kolbrún R. Gylfadóttir | 28 November 2021 |
| India | S. Jaishankar | 31 May 2019 |
| Indonesia | Retno Marsudi | 27 October 2014 |
| Iran | Hossein Amir-Abdollahian | 25 August 2021 |
| Iraq | Fuad Hussein | 6 June 2020 |
| Ireland | Micheál Martin | 17 December 2022 |
| Israel | Eli Cohen | 29 December 2022 |
| Italy | Antonio Tajani | 22 October 2022 |
| Ivory Coast | Kandia Camara | 6 April 2021 |
| Jamaica | Kamina Johnson-Smith | 7 March 2016 |
| Japan | Yoshimasa Hayashi | 10 November 2021 |
| Jordan | Ayman Safadi | 15 January 2017 |
| Kazakhstan | Murat Nurtleu | 3 April 2023 |
| Kenya | Alfred Mutua[37] | 27 October 2022 |
| Kiribati | Taneti Mamau (president) | 15 March 2016 |
| Kuwait | Salem Abdullah Al-Jaber Al-Sabah | 17 December 2019 |
| Kyrgyzstan | Jeenbek Kulubaev | 22 April 2022 |
| Laos | Saleumxay Kommasith | 19 April 2016 |
| Latvia | Arturs Krisjanis Karins | 8 July 2023 |
| Lebanon | Abdallah Bou Habib | 10 September 2021 |
| Lesotho | Mpotjoane Lejone | 28 October 2022 |
| Liberia | Dee-Maxwell Saah Kemayah, Sr. | 6 October 2020 |
| Libya | Najla Mangoush | 15 March 2021 |
| Liechtenstein | Dominique Hasler | 25 March 2021 |
| Lithuania | Gabrielius Landsbergis | 11 December 2020 |
| Luxembourg | Jean Asselborn | 21 July 2004 |
| Madagascar | Yvette Sylla [fr] | 20 February 2023 |
| Malawi | Nancy Tembo | 28 January 2022 |
| Malaysia | Zambry Abdul Kadir | 3 December 2022 |
| Maldives | Abdulla Shahid | 17 November 2018 |
| Mali | Abdoulaye Diop | 11 June 2021 |
| Malta | Ian Borg | 30 March 2022 |
| Marshall Islands | Kitlang Kabua[38] | 7 June 2022 |
| Mauritania | Mohamed Salem Ould Merzoug | 31 March 2022 |
| Mauritius | Alan Ganoo | 6 February 2021 |

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|---|---|---|
| Mexico | Alicia Bárcena Ibarra | 12 June 2023 |
| Federated States of Micronesia | Kandhi A. Elieisar | 3 December 2019 |
| Moldova | Nicu Popescu | 6 August 2021 |
| Monaco | Isabelle Berro-Amadeï | 17 January 2022 |
| Mongolia | Batmunkh Battsetseg | 29 January 2021 |
| Montenegro | Ranko Krivokapić | 28 April 2022 |
| Morocco | Nasser Bourita | 5 April 2017 |
| Mozambique | Verónica Macamo | 17 January 2020 |
| Myanmar | Than Swe | 1 February 2023[39] |
| Namibia | Netumbo Nandi-Ndaitwah | 4 December 2012 |
| Nauru | Russ Kun (president) | 29 September 2022 |
| Nepal | Narayan Prakash Saud | 16 April 2023 |
| Netherlands | Wopke Hoekstra | 10 January 2022 |
| New Zealand | Nanaia Mahuta | 6 November 2020 |
| Nicaragua | Denis Moncada [es] | 16 January 2017 |
| Niger | Bakary Yaou Sangaré | 10 August 2023 |
| Nigeria | Yusuf Tuggar | 21 August 2023 |
| North Korea | Choe Son-hui | 11 June 2022 |
| North Macedonia | Bujar Osmani | 30 August 2020 |
| Norway | Anniken Huitfeldt | 14 October 2021 |
| Oman | Badr bin Hamad bin Hamood Al Busaidi | 26 August 2020 |
| Pakistan | Jalil Abbas Jilani | 17 August 2023 |
| Palau | Gustav Aitaro | 3 September 2021 |
| Palestine | Riyad al-Maliki[40] | 19 May 2009 (Since 2007 for the Palestinian Authority[41]) |
| Panama | Janaina Tewaney | 11 October 2022 |
| Papua New Guinea | James Marape | 12 May 2023 |
| Paraguay | Euclides Acevedo | 25 January 2021 |
| Peru | Ana Cecilia Gervasi | 11 December 2022 |
| Philippines | Enrique Manalo | 1 July 2022 |
| Poland | Zbigniew Rau | 26 August 2020 |
| Portugal | João Gomes Cravinho | 30 March 2022 |
| Qatar | Sheikh Mohammed bin Abdulrahman Al Thani | 27 January 2016 |
| Romania | Luminița Odobescu | 15 June 2023 |
| Russia | Sergey Lavrov | 9 March 2004 |
| Rwanda | Vincent Biruta | 4 November 2019 |
| Saint Kitts and Nevis | Denzil Douglas | 13 August 2022 |
| Saint Lucia | Alva Baptiste | 5 August 2021 |
| Saint Vincent and the Grenadines | Ralph Gonsalves (prime minister) | 10 November 2020 |
| Samoa | Fiamē Naomi Mataʻafa (prime minister) | 24 May 2021 |
| San Marino | Luca Beccari | 8 January 2020 |
| São Tomé and Príncipe | Alberto Neto Pereira | 11 November 2022 |
| Saudi Arabia | Prince Faisal bin Farhan Al Saud | 29 October 2019 |
| Senegal | Aïssata Tall Sall | 1 November 2020 |
| Serbia | Ivica Dačić[42] | 26 October 2022 |
| Seychelles | Sylvestre Radegonde | 16 November 2020 |
| Sierra Leone | David J. Francis | 30 April 2021 |
| Singapore | Vivian Balakrishnan | 1 October 2015 |
| Slovakia | Rastislav Káčer[43] | 1 April 2021 |

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|---|---|---|
| Slovenia | Tanja Fajon | 1 June 2022 |
| Solomon Islands | Jeremiah Manele | 25 April 2019 |
| Somalia | Abshir Omar Huruuse | 2 August 2022 |
| South Africa | Naledi Pandor | 29 May 2019 |
| South Korea | Park Jin | 12 May 2022 |
| South Sudan | Mayiik Ayii Deng | 9 September 2021 |
| Spain | José Manuel Albares | 10 July 2021 |
| Sri Lanka | Ali Sabry PC AAL | 22 July 2022 |
| Sudan | Ali Sadiq Ali (acting) | 19 January 2022 |
| Suriname | Albert Ramdin | 16 July 2020[44] |
| Sweden | Tobias Billström | 18 October 2022 |
| Switzerland | Ignazio Cassis | 1 November 2017 |
| Syria | Faisal Mekdad | 22 November 2020 |
| Tajikistan | Sirojiddin Muhriddin | 29 November 2013 |
| Tanzania | Stergomena Tax[45] | 3 October 2022 |
| Thailand | Don Pramudwinai | 20 August 2015 |
| Timor-Leste | Adaljíza Magno | 24 June 2020 |
| Togo | Robert Dussey | 17 September 2013 |
| Tonga | Fekitamoeloa 'Utoikamanu | 28 December 2021 |
| Trinidad and Tobago | Amery Browne | 19 August 2020 |
| Tunisia | Othman Jerandi | 2 September 2020 |
| Turkey | Hakan Fidan | 4 June 2023 |
| Turkmenistan | Raşit Meredow | 7 July 2001 |
| Tuvalu | Simon Kofe | September 2019 |
| Uganda | Jeje Odongo | 21 June 2021 |
| Ukraine | Dmytro Kuleba | 4 February 2020 |
| United Arab Emirates | Sheikh Abdullah bin Zayed Al Nahyan | 9 February 2006 |
| United Kingdom | James Cleverly | 6 September 2022 |
| United States | Antony Blinken | 26 January 2021 |
| Uruguay | Francisco Bustillo | 6 July 2020 |
| Uzbekistan | Vladimir Norov (acting) | 27 April 2022 |
| Vanuatu | Jotham Napat | 4 November 2022 |
| Venezuela | Carlos Faria[46] | 17 May 2022 |
| Vietnam | Bùi Thanh Sơn | 8 April 2021 |
| Yemen | Ahmad Awad Bin Mubarak | 18 December 2020 |
| Zambia | Stanley Kakubo | 7 September 2021 |
| Zimbabwe | Frederick Shava | 8 February 2021 |

# CURRENT MONARCHS

| Rank | Name | Nation(s) | Born | Ascended |
|---|---|---|---|---|
| 1 | Abdullah II | Jordan | 30-01-62 | 7-02-99 |
| 2 | Albert II | Monaco | 14-03-58 | 6-04-05 |
| 3 | Abdullah Ri'ayatuddin | Pahang (Malaysia) | 30-07-1959 | 15-01-2019 |
| 4 | Charles Mumbere | Rwenzururu (Uganda) | 1953 | 19-10-09 |
| 5 | Charles III | Commonwealth Realms | 14-11-1948 | 08-09-2022 |
| 6 | Felipe VI | Spain | 30-01-1968 | 19-06-2014 |
| 7 | Goodwill Zwelithini kaBhekuzulu | Zulu people (South Africa) | 14-07-48 | 17-09-68 |
| 8 | Hamad bin Isa Al Khalifa | Bahrain | 28-01-50 | 6-03-99 |
| 9 | Hamad bin Mohammed Al Sharqi | Fujairah (United Arab Emirates) | 25-08-48 | 18-09-74 |

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|---|---|---|---|---|
| 10 | Hamengkubuwana X | Yogyakarta (Indonesia) | 2-04-46 | 7-03-89 |
| 11 | Hans-Adam II | Liechtenstein | 14-02-45 | 13-11-89 |
| 12 | Harald V | Norway | 21-02-37 | 17-01-91 |
| 13 | Hassanal Bolkiah | Brunei | 15-07-46 | 5-10-67 |
| 14 | HH Pope Francis | Vatican City | 17-12-36 | 13-03-13 |
| 15 | HM King Carl XVI Gustaf | Sweden | 30-04-46 | 15-09-73 |
| 16 | HM King Letsie III | Kingdom of Lesotho | 17-07- 63 | 07-02-96 |
| 17 | HM King Mswati III | Swaziland | 19-04-68 | 25-04-86 |
| 18 | HM King Vajiralongkorn | Thailand | 28-07-52 | 13-10-16 |
| 19 | HM Queen Margrethe II | Denmark | 16-04-40 | 14-01-72 |
| 20 | HRH Grand Duke Henri | Luxembourg | 16-04-55 | 7-10-00 |
| 21 | Humaid bin Rashid Al Nuaimi | Ajman (United Arab Emirates) | 1931 | 6-09-81 |
| 22 | İbrahim Ismail | Johor (Malaysia) | 22-11-58 | 22-01-10 |
| 23 | Jigme Khesar Namgyel Wangchuck | Bhutan | 21-02-80 | 15-12-06 |
| 24 | Joan Enric Vives i Sicília | Andorra | 24-07-1949 | 12-05-2003 |
| 25 | Kapiliele Faupala | Wallis Island (Uvea) (Wallis and Futuna) | 1940 | 25-06-08 |
| 26 | Mohammad bin Zayed Al Nahyan | Abu Dhabi (United Arab Emirates) | 11-03-1961 | 13-05-2022 |
| 27 | King Salman bin Abdulaziz | Saudi Arabia | 31-12-35 | 23-01-15 |
| 28 | Mizan Zainal Abidin | Terengganu (Malaysia) | 22-01-62 | 15-05-98 |
| 29 | Mohammed bin Maktoum | Dubai (U.A E) | 22-07-49 | 4-01-06 |
| 30 | Mohammed VI | Morocco | 21-08-63 | 23-07-99 |
| 31 | Muhammad V | Kelantan (Malaysia) | 6-10-69 | 13-09-10 |
| 32 | Muwenda Mutebi II | Buganda (Uganda) | 13-04-55 | 31-07-93 |
| 33 | Mahmud Sallehuddin | Kedah (Malaysia) | 30-04-942 | 11-09-2017 |
| 34 | Norodom Sihamoni | Cambodia | 14-05-53 | 14-10-04 |
| 35 | Nazrin Muizzuddin Shah | Perak (Malaysia) | 27-11-1956 | 29-05-2014 |
| 36 | Naruhito | Japan | 23-02-1960 | 01-05-2019 |
| 37 | Otumfuo Nana Osei Tutu II | Ashanti people (Ghana) | 6-05-50 | 26-04-99 |
| 38 | Paku Alam X | Pakualaman(Indonesia) | 15-12-1962 | 07-01-2016 |
| 39 | Philippe | Belgium | 15-04-60 | 21-07-13 |
| 40 | Eufenio Takala | Sigave (Wallis and Futuna) | | 05-03-2016 |
| 41 | Nawaf Al-Ahmad Al-Jaber Al-Sabah | Kuwait | 25-06-1937 | 29-09-2020 |
| 42 | Saud bin Rashid Al Mu'alla | Umm al-Quwain (UAE) | 1-10-52 | 2-01-09 |
| 43 | Saud bin Saqr al Qasimi | Ras al-Khaimah (UAE) | 10-02-56 | 27-10-10 |
| 44 | Sharafuddin Idris Shah | Selangor (Malaysia) | 24-10-45 | 21-11-01 |
| 45 | Sultan bin Mohamed Al-Qassimi III | Sharjah (United Arab Emirates) | 2-07-39 | 25-01-72 |
| 46 | Sultan Haitham bin Tariq | Oman | 13-10-1954 | 11-01-2020 |
| 47 | Tamim bin Hamad Al Thani | Qatar | 3-06-80 | 25-06-13 |
| 48 | Tuanku Syed Sirajuddin | Perlis (Malaysia) | 16-05-43 | 17-04-00 |
| 49 | Tuheitia Paki | Māori King (New Zealand) | 21-04-55 | 21-08-06 |

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|---|---|---|---|---|
| 50 | Tunku Muhriz | Negeri Sembilan (Malaysia) | 14-01-48 | 29-12-08 |
| 51 | Tupou VI | Tonga | 12-07-59 | 18-03-12 |
| 52 | Vajiralongkorn (Rama X) | Thailand | 28-07-1952 | 13-10-2016 |
| 53 | Willem-Alexander | Netherlands | 27-04-67 | 30-04-13 |

# Permanent Representative in UN

| Sr | Country | Name | Date |
|---|---|---|---|
| 1. | Afghanistan | Naseer Ahmad Faiq | interim |
| 2. | Albania | Besiana Kadare | 30 June 2016 |
| 3. | Algeria | Mohamed Ennadir Larbaoui | 13 January 2022 |
| 4. | Andorra | Elisenda Vives Balmaña | 3 November 2015 |
| 5. | Angola | Maria de Jesus dos Reis Ferreira | 21 May 2018 |
| 6. | Antigua and Barbuda | Walton Alfonso Webson | 17 December 2014 |
| 7. | Argentina | María del Carmen Squeff | 31 August 2020 |
| 8. | Armenia | Mher Margaryan | 31 August 2018 |
| 9. | Australia | James Larsen | 26 July 2023 |
| 10. | Austria | Alexander Marschik | 6 July 2020 |
| 11. | Azerbaijan | Yashar T. Aliyev | 10 June 2014 |
| 12. | Bahamas | Stan Oduma Smith | 10 March 2022 |
| 13. | Bahrain | Jamal Fares Alrowaiei | 14 September 2011 |
| 14. | Bangladesh | Muhammad Abdul Muhith | 20 Sep 2022 |
| 15. | Barbados | François Ayodele Jackman | 21 May 2021 |
| 16. | Belarus | Valentin Rybakov | 15 September 2017 |
| 17. | Belgium | Philippe Kridelka | 10 August 2020 |
| 18. | Belize | Carlos Cecil Fuller | 31 March 2021 |
| 19. | Benin | Marc Hermanne G. Araba[4] | 5 January 2021 |
| 20. | Bhutan | Doma Tshering | 13 September 2017 |
| 21. | Bolivia | Diego Pary Rodríguez | 11 December 2020 |
| 22. | Bosnia and Herzegovina | Sven Alkalaj | 5 July 2019 |
| 23. | Botswana | Collen Vixen Kelapile | 26 October 2018 |
| 24. | Brazil | Ronaldo Costa Filho | 6 February 2020 |
| 25. | Brunei Darussalam | Noor Qamar Sulaiman | 18 February 2019 |
| 26. | Bulgaria | Lachezara Stoeva[5] | 17 February 2021 |
| 27. | Burkina Faso | Seydou Sinka | 16 September 2021 |
| 28. | Burundi | Zéphyrin Maniratanga | 26 April 2021 |
| 29. | Cabo Verde | Júlio César Freire de Morais | 18 November 2021 |
| 30. | Cambodia | Sovann Ke | 13 August 2018 |
| 31. | Cameroon | Michel Tommo Monthé | 8 September 2008 |
| 32. | Canada | Robert Rae | 31 August 2020 |
| 33. | Central African Republic | Marcien Aubin Kpatamango | chargé d'affaires ad interim |
| 34. | Chad | Ammo Aziza Baroud | 11 December 2020 |
| 35. | Chile | Paula Narváez Ojeda | 8 June 2022 |
| 36. | China | Zhang Jun | 30 July 20 |

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|---|---|---|---|
| 37. | Colombia | Leonor Zalabata Torres | 6 October 2022 |
| 38. | Comoros | Issimail Chanfi | 4 December 2020 |
| 39. | Congo | Lazare Makayat Safouesse | 17 March 2022 |
| 40. | Costa Rica | Maritza Chan Valverde[6] | 26 August 2022 |
| 41. | Côte d'Ivoire | Kacou Houadja Léon Adom | 12 July 2018 |
| 42. | Croatia | Ivan Šimonović | 16 September 2019 |
| 43. | Cuba | Pedro Luis Pedroso Cuesta | 16 October 2020 |
| 44. | Cyprus | Andreas Hadjichrysanthou[7] | 17 February 2021 |
| 45. | Czech Republic | Jakub Kulhánek | 15 February 2022 |
| 46. | Democratic People's Republic of Korea | Kim Song [ja] | 20 September 2018 |
| 47. | Democratic Republic of the Congo | Georges Nzongola-Ntalaja | 13 January 2022 |
| 48. | Denmark | Martin Bille Hermann | 14 January 2019 |
| 49. | Djibouti | Mohamed Siad Doualeh | 24 November 2015 |
| 50. | Dominica | Loreen Ruth Bannis-Roberts | 22 August 2016 |
| 51. | Dominican Republic | José Alfonso Blanco Conde | 19 October 2020 |
| 52. | Ecuador | Cristian Espinosa Cañizares | 28 September 2020 |
| 53. | Egypt | Osama Mahmoud Abdel Khalek Mahmoud | 16 September 2021 |
| 54. | El Salvador | Egriselda Aracely González López | 21 August 2019 |
| 55. | Equatorial Guinea | Anatolio Ndong Mba | 7 January 2010 |
| 56. | Eritrea | Sophia Tesfamariam | 5 September 2019 |
| 57. | Estonia | Sven Jürgenson | 13 August 2015 |
| 58. | Eswatini | Melusi Martin Masuku | 5 July 2017 |
| 59. | Ethiopia | Taye Atske Sellassie Amde | 10 September 2018 |
| 60. | Fiji | Satyendra Prasad | 21 May 2018 |
| 61. | Finland | Outi Elina Kalkku[6] | 30 August 2022 |
| 62. | France | Nicolas de Rivière | 8 July 2019 |
| 63. | Gabon | Michel Xavier Biang | 18 August 2017 |
| 64. | Gambia | Lang Yabou | 18 October 2018 |
| 65. | Georgia | Kaha Imnadze[8] | 23 July 2013 |
| 66. | Germany | Antje Leendertse | 16 September 2021 |
| 67. | Ghana | Harold Adlai Agyeman | 21 May 2021 |
| 68. | Greece | Maria Theofili | 13 September 2017 |
| 69. | Grenada | Keisha A. McGuire | 12 April 2016 |
| 70. | Guatemala | Luis Antonio Lam Padilla | 5 September 2019 |
| 71. | Guinea | Aly Diane[9] | 28 January 2021 |
| 72. | Guinea-Bissau | Henrique Adriano Da Silva[10] | 18 February 2021 |
| 73. | Guyana | Carolyn Rodrigues-Birkett | 2 October 2020 |
| 74. | Haiti | Antonio Rodrigue | 4 September 2020 |
| 75. | Honduras | Mary Elizabeth Flores | 29 April 2010 |
| 76. | Hungary | Zsuzsanna Horváth[11] | 16 February 2021 |
| 77. | Iceland | Jörundur Valtýsson | 5 September 2019 |

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|---|---|---|---|
| 79. | Indonesia | Arrmanatha Christiawan Nasir | 4 January 2022 |
| 80. | Iran | Saeed Iravani | 7 Sep 2022 |
| 81. | Iraq | Mohammed Hussein Bahr Aluloom | 12 September 2017 |
| 82. | Ireland | Geraldine Byrne Nason | 18 August 2017 |
| 83. | Israel | Gilad Erdan | 12 August 2020 |
| 84. | Italy | Maurizio Massari | 19 July 2021 |
| 85. | Jamaica | Brian Christopher Manley Wallace | 16 September 2021 |
| 86. | Japan | Ishikane Kimihiro [ja] | 19 November 2019 |
| 87. | Jordan | Mahmoud Daifallah Hmoud | 2 September 2021 |
| 88. | Kazakhstan | Magzhan Ilyassov | 26 October 2020 |
| 89. | Kenya | Martin Kimani | 3 December 2020 |
| 90. | Kiribati | Teburoro Tito | 13 September 2017 |
| 91. | Kuwait | Mansour Ayyad Sh. A. Alotaibi | 4 March 2010 |
| 92. | Kyrgyzstan | Aida Kasymalieva | 15 February 2022 |
| 93. | Lao People's Democratic Republic | Anouparb Vongnorkeo | 28 January 2020 |
| 94. | Latvia | Andrejs Pildegovičs | 5 September 2018 |
| 95. | Lebanon | Amal Mudallali | 15 January 2018 |
| 96. | Lesotho | Nkopane Raseeng Monyane | 18 February 2019 |
| 97. | Liberia | Dee-Maxwell Saah Kemayah Sr. | 20 September 2018 |
| 98. | Libya | Taher M. El-Sonni | 6 January 2020 |
| 99. | Liechtenstein | Christian Wenaweser | 1 October 2002 |
| 100. | Lithuania | Rytis Paulauskas | 25 May 2021 |
| 101. | Luxembourg | Olivier Maes | 15 July 2021 |
| 102. | Madagascar | Vero Henintsoa Andriamiarisoa | chargé d'affaires ad interim |
| 103. | Malawi | Agnes Mary Chimbiri-Molande | 13 January 2022 |
| 104. | Malaysia | Syed Mohamad Hasrin Aidid | 5 July 2019 |
| 105. | Maldives | Thilmeeza Hussain | 21 May 2019 |
| 106. | Mali | Issa Konfourou | 9 September 2016 |
| 107. | Malta | Vanessa Frazier | 6 January 2020 |
| 108. | Marshall Islands | Amatlain Elizabeth Kabua | 5 July 2016 |
| 109. | Mauritania | Sidi Mohamed Laghdaf | 20 August 2020 |
| 110. | Mauritius | Jagdish Dharamchand Koonjul | 24 November 2015 |
| 111. | Mexico | Juan Ramón de la Fuente Ramírez | 18 February 2019 |
| 112. | Federated States of Micronesia | Jane J. Chigiyal | 2 December 2011 |
| 113. | Monaco | Isabelle F. Picco | 11 September 2009 |
| 114. | Mongolia | Vorshilov Enkhbold | 20 February 2020 |
| 115. | Montenegro | Milica Pejanović Đurišić | 21 May 2018 |
| 116. | Morocco | Omar Hilale | 23 April 2014 |
| 117. | Mozambique | Pedro Comissário Afonso | 8 December 2020 |
| 118. | Myanmar | Kyaw Moe Tun | 20 October 2020 |
| 119. | Namibia | Neville Melvin Gertze | 9 January 2017 |
| 120. | Nauru | Margo Reminisse Deiye | 27 November 2020 |

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|---|---|---|---|
| 121. | Nepal | Amrit Bahadur Rai | 8 March 2019 |
| 122. | Netherlands | Yoka Brandt | 2 September 2020 |
| 123. | New Zealand | Carolyn Schwalger | 4 January 2022 |
| 124. | Nicaragua | Jaime Hermida Castillo | 18 October 2018 |
| 125. | Niger | Abdou Abarry | 4 June 2019 |
| 126. | Nigeria | Tijjani Muhammad Bande | 3 May 2017 |
| 127. | North Macedonia | Ljubomir Frchkoski | 17 May 2022 |
| 128. | Norway | Mona Juul | 14 January 2019 |
| 129. | Oman | Mohamed Al Hassan | 21 August 2019 |
| 130. | Pakistan | Munir Akram | 5 November 2019 |
| 131. | Palau | Ilana Victorya Seid | 16 September 2021 |
| 132. | Panama | Markova Concepción Jaramillo | 16 November 2020 |
| 133. | Papua New Guinea | Max Hufanen Rai | 9 June 2016 |
| 134. | Paraguay | Julio César Arriola Ramirez | 21 March 2017 |
| 135. | Peru | Manuel Rodriguez Cuadros | 14 October 2021 |
| 136. | Philippines | Enrique Austria Manalo | 27 July 2020 |
| 137. | Poland | Krzysztof Szczerski | 2 September 2021 |
| 138. | Portugal | Ana Paula Baptista Grade Zacarias | 17 May 2022 |
| 139. | Qatar | Sheikha Alya Ahmed Saif Al-Thani | 24 October 2013 |
| 140. | Republic of Korea | Hwang Joon-kook [ko] | 7 June 2022 |
| 141. | Republic of Moldova | Gheorghe Leucă | 18 November 2021 |
| 142. | Romania | Ion Jinga | 13 August 2015 |
| 143. | Russian Federation | Vassily A. Nebenzia | 28 July 2017 |
| 144. | Rwanda | Claver Gatete | 28 March 2022 |
| 145. | Saint Kitts and Nevis | Ian MacDonald Liburd[12] | 18 January 2021 |
| 146. | Saint Lucia | Menissa Rambally | 10 March 2022 |
| 147. | Saint Vincent and the Grenadines | Inga Rhonda King | 13 September 2013 |
| 148. | Samoa | Fatumanava-o-Upolu III Pa'olelei Luteru | 2 June 2021 |
| 149. | San Marino | Damiano Beleffi | 22 August 2016 |
| 150. | São Tomé and Príncipe | Alcínio Cravid e Silva | chargé d'affaires ad interim |
| 151. | Saudi Arabia | Abdallah Y. Al-Mouallimi | 23 June 2011 |
| 152. | Senegal | Cheikh Niang | 12 July 2018 |
| 153. | Serbia | Nemanja Stevanović | 12 March 2021 |
| 154. | Seychelles | Ian Dereck Joseph Madeleine | 16 September 2021 |
| 155. | Sierra Leone | Alhaji Fanday Turay | 2 September 2021 |
| 156. | Singapore | Burhan Gafoor | 22 August 2016 |
| 157. | Slovakia | Michal Mlynár | 18 August 2017 |
| 158. | Slovenia | Boštjan Malovrh | 22 June 2021 |
| 159. | Solomon Islands | Jane Mugafalu Kabui Waetara[6] | 16 June 2022 |
| 160. | Somalia | Abukar Dahir Osman | 26 July 2017 |
| 161. | South Africa | Mathu Theda Joyini[13] | 22 January 2021 |
| 162. | South Sudan | Alier Deng Ruai Deng | 13 June 2023 |

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|---|---|---|---|
| 163. | Spain | Agustín Santos Maraver | 5 September 2018 |
| 164. | Sri Lanka | Peter Mohan Maithri Pieris[14] | 13 January 2021 |
| 165. | Sudan | Hassan Hamid | 23 June 2023 |
| 166. | Suriname | Sunil Algram Sitaldin | 4 January 2022 |
| 167. | Sweden | Anna Karin Eneström | 6 January 2020 |
| 168. | Switzerland | Pascale Baeriswyl | 26 June 2020 |
| 169. | Syria | Bassam Sabbagh[15] | 23 February 2021 |
| 170. | Tajikistan | Jonibek Ismoil Hikmat | 4 June 2021 |
| 171. | Thailand | Suriya Chindawongse | 6 December 2021 |
| 172. | Timor-Leste | Karlito Nunes | 12 August 2021 |
| 173. | Togo | Koffi Akakpo | chargé d'affaires ad interim |
| 174. | Tonga | Viliami Va'inga Tōnē | 5 July 2018 |
| 175. | Trinidad and Tobago | Dennis Francis | 2 September 2021 |
| 176. | Tunisia | Tarek Ladeb | 17 September 2020 |
| 177. | Turkey | Sedat Onal | 21 February 2023 |
| 178. | Turkmenistan | Aksoltan Ataýewa | 23 February 1995 |
| 179. | Tuvalu | Samuelu Laloniu | 26 July 2017 |
| 180. | Uganda | Adonia Ayebare | 3 May 2017 |
| 181. | Ukraine | Sergiy Kyslytsya | 20 February 2020 |
| 182. | United Arab Emirates | Lana Zaki Nusseibeh | 18 September 2013 |
| 183. | United Kingdom | Dame Barbara Woodward | 2 December 2020 |
| 184. | United Republic of Tanzania | Kennedy Godfrey Gastorn | 13 March 2020 |
| 185. | United States of America | Linda Thomas-Greenfield | 25 February 2021 |
| 186. | Uruguay | Carlos Daniel Amorín Tenconi | 15 October 2019 |
| 187. | Uzbekistan | Bakhtiyor Ibragimov | 23 May 2017 |
| 188. | Vanuatu | Odo Tevi | 13 August 2014 |
| 189. | Venezuela | Samuel R. Moncada Acosta | 19 December 2017 |
| 190. | Vietnam | Đặng Hoàng Giang | 25 February 2022 |
| 191. | Yemen | Abdullah Ali Fadhel Al-Saadi | 20 December 2018 |
| 192. | Zambia | Chola Milambo | 17 May 2022 |
| 193. | Zimbabwe | Albert Ranganai Chimbindi | 26 July 2021 |

# NOBEL PRIZE

## Nobel Prize

### NOBEL PRIZE

The Nobel Prize is a set of 6 prestigious awards, awarded annually. Swedish chemist, engineer and industrialist Alfred Nobel established five Nobel Prizes in 1895 (Chemistry, Peace, Literature, Physiology, and Physics). These awards were first awarded in 1901. It was in 1968 when Sweden's Central Bank established the Economic Nobel Prize in memory of Alfred Nobel. The award ceremony for 5 prizes is hosted annually in Stockholm, Sweden to award prizes while the Nobel Peace Prize ceremony is held in Oslo, Norway.

### PAKISTANI NOBEL LAUREATES:

- Abdus Salam was the first Pakistani to be awarded with a Nobel Prize. He received a Nobel Prize in Physics in 1975. He was awarded jointly with Sheldon Lee Glashow for contribution to the Theory of Unified Weak and Electromagnetic Interaction.
- Malala Yousafzai received a Nobel Peace Prize in 2014 jointly with Kailash Satyarthi (Indian) for struggle against suppression of children and advocating for the right to education for all children.

### Countries with the most number of Nobel laureates

| Country | Number of Nobel Laureates |
|---|---|
| USA | 398 |
| United Kingdom | 137 |
| Germany | 111 |
| France | 70 |
| Sweden | 32 |
| Russia | 32 |
| Japan | 29 |
| Canada | 28 |
| Switzerland | 27 |
| Netherlands | 22 |

### Important Fact

- Rabinder Nath Tegore was the first person from the Sub-Continent to receive a Nobel Prize in Literature (1913).

### Nobel Prize Winners of 2018

| Field of Study | Name of the Winner |
|---|---|
| Chemistry | George Smith, Gregory Winter<br>Frances Arnold |
| Physics | Gerard Mourou<br>Donna Strickland<br>Arthur Ashkin |
| Peace Prize | Denis Mukwege Mukengere<br>Nadia Murad |
| Economic Sciences | Paul Romer<br>William Nordhaus |
| Physiology or Medicine | James P. Allison<br>Tasuku Honjo |

### Nobel Prizes and Laureates 2019

| Field of Study | Name of the Winner |
|---|---|
| Physics | James Peebles, Michel Mayor<br>Didier Queloz |
| Chemistry | John B. Goodenough,<br>M. Stanley Whittingham,<br>Akira Yoshino |
| Physiology or Medicine | William G. Kaelin Jr.Sir Peter J. Ratcliffe,<br>Gregg L. Semenza |
| Literature | Peter Handke |
| Peace Prize | Abiy Ahmed Ali |
| Economic Sciences | Abhijit Banerjee , Esther Duflo,<br>Michael Kremer |

### Nobel Prizes and Laureates 2020

| Nobel Laureates | Field | Contribution |
|---|---|---|
| Harvey J. Alter, Michael Houghton and Charles M. Rice | Medicine | Discovered Hepatitis C virus |
| Roger Penrose | Physics | Discovered that black hole formation is a robust prediction of the general theory of relativity |
| Reinhard Genzel and Andrea Ghez | | Discovered supermassive compact object at the centre of our galaxy |
| Emmanuelle Charpentier and Jennifer A. Doudna | Chemistry | Discovered the method for genome editing |
| Louise Glück | Literature | For her unmistakable poetic voice that with austere beauty makes individual existence universal |
| World Food Programme (WFP) | Peace | For its efforts to combat hunger, for its contribution to bettering conditions for peace in conflict-affected areas and for acting as a driving force in efforts to prevent the use of hunger as a weapon of war and conflict.<br>It was established at the behest of Dwight Eisenhower. |
| Paul R. Milgrom, | Economic | For improvements to |

| | | |
|---|---|---|
| Robert B. Wilson | Sciences | auction theory and inventions of new auction formats. |

- Frederic Parsy, also known as the Apostle of Peace) was the first Nobel Peace Prize Winner, who won the award in 1901. He was from France.
- Max Planck won a Nobel Prize in Physics in 1918 for the discovery of the Energy Quantum.

## Nobel Prizes and Laureates 2021

**The Nobel Prize in Physics 2021**

"For groundbreaking contributions to our understanding of complex systems"

Syukuro Manabe and Klaus Hasselmann "for the physical modeling of Earth's climate, quantifying variability and reliably predicting global warming"

Giorgio Parisi "for the discovery of the interplay of disorder and fluctuations in physical systems from atomic to planetary scales"

**The Nobel Prize in Chemistry 2021**

Benjamin List and David MacMillan "for the development of asymmetric organocatalysis"

**The Nobel Prize in Physiology or Medicine 2021**

David Julius and Ardem Patapoutian "for their discoveries of receptors for temperature and touch"

**The Nobel Prize in Literature 2021**

Abdulrazak Gurnah "for his uncompromising and compassionate penetration of the effects of colonialism and the fate of the refugee in the gulf between cultures and continents"

**The Nobel Peace Prize 2021**

Maria Ressa and Dmitry Muratov "for their efforts to safeguard freedom of expression, which is a precondition for democracy and lasting peace"

**Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2021**

David Card "for his empirical contributions to labour economics"

Joshua D. Angrist and Guido W. Imbens "for their methodological contributions to the analysis of causal relationships"

## Nobel Prizes and Laureates 2022

| Field of Study | Name of Scientist |
|---|---|
| Physics | Alain Aspect, John F. Clauser and Anton Zeilinger "for experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science" |
| Chemistry | Carolyn R. Bertozzi, Morten Meldal and K. Barry Sharpless "for the development of click chemistry and bioorthogonal chemistry" |
| Physiology or Medicine | Svante Pääbo "for his discoveries concerning the genomes of extinct hominins and human evolution" |
| Literature | Annie Ernaux "for the courage and clinical acuity with which she uncovers the roots, estrangements and collective restraints of personal memory" |
| Nobel Peace Prize | Ales Bialiatski, Memorial, and Center for Civil Liberties. The Peace Prize laureates represent civil society in their home countries. They have for many years promoted the right to criticize power and protect the fundamental rights of citizens. They have made an outstanding effort to document war crimes, human right abuses and the abuse of power. Together they demonstrate the significance of civil society for peace and democracy. |
| Economic Sciences | Ben S. Bernanke, Douglas W. Diamond and Philip H. Dybvig "for research on banks and financial crises". |

### MUSLIM SCIENTIST RECEIVED NOBEL PRIZE

**First Muslim to Receive Nobel Prize or Nobel Peace Prize**
Anwar al-Sadat is the first Muslim to receive a Nobel Peace Prize in 1978.

**First Muslim Scientist to receive Nobel Prize in Chemistry**
Ahmed Zewail is the first Muslim chemist to be awarded the Nobel Prize in 1999 and the second Muslim scientist to get Nobel Prize.

**First Muslim author to receive Nobel Prize in Literature**
Naguib Mahfouz is the first Muslim author to receive Nobel Prize in Literature in 1988.

### PAKISTANIS RECEIVED NOBEL PRIZE

**First Pakistani to receive Nobel Prize or First Pakistani to receive Nobel Prize in Physics**
Mohammad Abdus Salam is the first Pakistani Scientist to receive Nobel Prize (Physics) in 1979.

**Second Pakistani to receive Nobel Prize**
Malala Yousafzai is the second Pakistani and first Pashtun to be awarded a Nobel Prize. She was awarded the Nobel Peace Prize in 2014.

**The youngest Nobel Prize recipient**
**Malala Yousafzai** is the youngest Nobel Prize recipient ever. She was awarded the Nobel Peace Prize at the age of 17.



## Notable R... Prize

| Name |
|---|
| W. E. B. Du Boi... |
| Nikita Khrushch... |
| Sukarno |
| Fidel Castro |
| Faiz Ahmed Fa... |
| Pablo Picasso |
| Salvador Aller... |
| Sean MacBrid... |
| Angela Davis |
| Mahmoud D... |
| Indira Gandh... |
| Abdul Sattar... |
| Nelson Man... |
| Mikis Theod... |

## Notable Recipients of the Lenin Peace Prize

| Name | Country | Year |
|---|---|---|
| W. E. B. Du Bois | United States | 1959 |
| Nikita Khrushchev | Soviet Union | 1959 |
| Sukarno | Indonesia | 1960 |
| Fidel Castro | Cuba | 1961 |
| Faiz Ahmed Faiz | Pakistan | 1962 |
| Pablo Picasso | Spain | 1962 |
| Salvador Allende | Chile | 1973 |
| Sean MacBride | France | 1977 |
| Angela Davis | United States | 1980 |
| Mahmoud Darwish | Palestine | 1983 |
| Indira Gandhi | India | 1985 |
| Abdul Sattar Edhi | Pakistan | 1988 |
| Nelson Mandela | United States | 2001 |
| Mikis Theodorakis | Greece | 1989 |
| Oscar Niemeyer | Brazil | 1963 |
| Funmilayo Ransome-Kuti | Nigeria | 1970 |

## Famous Inventions of 20th Century

| Inventions | Name-Date |
|---|---|
| The Airplane | In 1903 by Wilbur and Orville Wright |
| The Television | In 1926 by John Logie Baird |
| The Computer | 1936-38 |
| The Radio | In by Nikola Tesla and Guglielmo Marconi |
| Nuclear Power | 1940 |
| The Automobile | In 1904 by Ford's Motors |
| Internet | The first internet connections were laid in the late 1950s |

# SPORTS

## Important Sports Terms

| Sports | Terms |
|---|---|
| Athletics | Relay, Track, Lane, Photo Finish, Hurdles, Shot Put, Discus Throw, Hammer throw, High Jump, Triple Jump Cross Country, etc. |
| Badminton | Shuttlecock, Service court, Double fault, Forehand, Back Hand, Smash, Hit, Drop, Net, Love, etc. |
| Baseball | Pinching, Homerun, Base runner, Perfect game, Throw, Strike, Put out, etc. |
| Basketball | Free throw, Common foul, Under head, Technical foul, Overhead, etc. |
| Bridge | Masterpoint, Grand slam, Perfect deals, Dummy, Trump, etc. |
| Billiards & Snooker | Pull, Cue, Hit, Object ball, Scoring, Cushion billiards, Break shot, etc. |
| Boxing | Knock out, Ring Stoppage, Punch, Round, Upper-cut, Kidney punch, Timing, Footwork, etc. |
| Chess | E. L. O. rating, Grandmaster, international master, Gambit, Kings Indian Defence, etc. |
| Cycling | Sprint, Time trial, Track Trace, Point race, etc. |
| Cricket | Toss, Run, Wicket, Pitch, Stump, Bails, Crease, Pavilion, Gloves, Wicket Keeper, Over, , Followon, Rubber, Spin, Ashes, Catch, Bowled, Stump out, Runout, L. B. W; Hit Wicket, Googley, Not out, No ball, Wide ball, Dead ball, Maiden over, Overthrow, Bye, Leg by, Cover drive, Late cut, Hook, Glance, Stroke, Shot, Pull, Sixer, Follow Through, Turn, , , Bouncer, Hattrick, Round the wicket, Over the wicket, Seamer, Boundary line, Slip, Square leg, Runner, Cover, Yorker, Gully, Long on, Silly point, Midwicket, Mid on, Forward short leg, Deep/mid-wicket, etc. |
| Football | Kick, Goal, Head, Penalty kick, Dribble, Offside, Move, Hattrick, Foul, Left out, Right out, Stopper, Defender, Side back, Pass, Baseline, Rebound, Comer back, etc. |
| Gymnastics | Parallel bar, Horizontal bar, Push up, Floor exercise, Uneven bar, Sit up. etc. |
| Hockey | Bully, Short corner, Hattrick, Goal, Penalty Corner, Penalty stroke, Pushin, Cut, Scoop, Dribble, Centre forward, Halfback, Astroturf, Sudden death, Left, Left out, Off-side, Tiebreaker, Carried, Stick, Striking circle, Undercutting, etc. |
| Horse Riding | Three-day Event, Dresses, Showjumping, Faults, etc. |
| Judo | Cocoa, White, Blue, Green belt, etc. |
| Polo | Polo-Bunker, Mallet, Chukker, etc. |
| Shooting | Rapidfire Pistol, Standard rifle, Free pistol, Air rifle, Range, Bull's eye, etc. |
| Swimming | Freestyle, Backstroke, Breaststroke, Butterfly, Lane, Pool, Crawl, etc. |
| Table Tennis | Volley, Late service, Drive spin, Half volley, Backhand, Chop, etc. |
| Tennis | Service, Grandslam, Deuce, Advantage, Game Point, Breakpoint, Smash, Shot, Break, Grass Court, Drop shot, Netplay, Baseline, etc. |
| Volleyball | Spikers, Booster, Deuce, Smash, Sidearm, Penetration, etc |
| Weight Lifting | Jerk, Snatch, etc |
| Wrestling | Freestyle, Point, Hal Nelson, Heave, etc |

## Olympics

- The First Olympic Games were held in Athens, Greece in 1896. 245 athletes from 14 nations participated and women were not allowed to participate. It was proposed by a French man, Baron Pierre de Coubertin, in 1894.
- Summer and Winter Olympics are two categories of Olympics, each held once every 4 years. Summer Olympics is a much bigger event as compared to the Winter Olympics.
- Summer Olympic Games are grouped in 5 categories whereas Winter Olympic Games are grouped in 3 categories. However, these categories are subject to change.
- The number of games in each Olympics is not fixed but in the 2016 Summer Olympics (hosted by Rio de Janeiro, first-ever Olympics in South America) the number of games was 28 whereas the number of games scheduled for 2020 Summer Olympics is 33.
- 2020 Summer Olympic (24 July 2020-9 August 2020) will be hosted by Tokyo.
- 2022 Winter Olympics (4 February 2022-20 February 2022) will be hosted by Beijing.
- To date (2019), the USA retains its position as winning the highest number of Olympic medals. The second position is held by China while the UK is in third position in terms of winning medals at the Olympics.
- English and French are the official languages for the Olympics apart from the language of the host country.
- The 2012 Olympic Games held in London were the first Olympic Games in which all participating countries sent women athletes.

## Asian Games

- Asian Games are held every 4 years. First Asian Games were held in 1951 in New Delhi and the 2018 Asian Games were held in Jakarta, Indonesia 2018. Upcoming Asian Games 2022 (10 September 2022- 25 September 2022) will be held in Hangzhou, Zhejiang, China.
- As of 2018 Asian Games, Pakistan has won 203 medals in total. 44 Gold medals, 64 Silver medals, and 95 Bronze medals. Pakistan won the highest number of medals at Asian Games in 1962 at Jakarta, Indonesia.

- Pakistan won 4 bronze medals in Asian Games 2018.
- Hockey was inducted in Asian Games in Tokyo in 1958.

## Commonwealth Games

- First commonwealth games were held in Hamilton, Canada in 1930 in which 400 athletes from 11 countries took part. Since then, they are held every 4 years.
- Commonwealth Games 2022 (27 July 2022- 7 August 2022) was held in Birmingham, England.
- Pakistan won 8 medals in 2022 commonwealth games and secured 18th position.
- Pakistani wrestler Muhammad Inam won the first Gold Medal in Commonwealth Games in Gold Coast, Australia Commonwealth games 2018.
- Pakistan's Javelin thrower Arshad Nadeem bags gold at Commonwealth Games 2022
- Pakistani weightlifter Nooh Dastagir Butt bagged the maiden gold medal in the Commonwealth Games (CWG) in August 2022.

## Most Medals in Sochi Olympics

*In Sochi, the host Russians captured a total of 29 medals, one more than the United States. Russia also tied with Norway in gold medals with 11, Canada had 10 golds and the U.S. had nine.

## ICC World Cup Winning Nations

| Year | Winner | Year | Winner |
|---|---|---|---|
| 1975 | West Indies | 1999 | Australia |
| 1979 | West Indies | 2003 | Australia |
| 1983 | India | 2007 | Australia |
| 1987 | Australia | 2011 | India |
| 1992 | Pakistan | 2015 | Australia |
| 1996 | Sri Lanka | 2019 | England |

## Nicknames of Cricket teams

| Cricket Team | Nickname |
|---|---|
| Australia | Baggy Greens |
| Pakistan | Shaheens |
| India | Men in Blue |
| South Africa | The Proteas |
| Zimbabwe | The Chevrons |
| Sri Lanka | The Lions |
| Bangladesh | The Tigers |
| New Zealand | The Kiwis/The Black Caps |
| West Indies | The Windies |

## Pakistan Super Leagues winners

| | | | |
|---|---|---|---|
| 2016 | Islamabad United | Quetta Gladiators | Islamabad won by 6 wickets. |
| 2017 | Peshawar Zalmi | Quetta Gladiators | Peshawar won by 58 runs |
| 2018 | Islamabad United | Peshawar Zalmi | Islamabad won by 3 wickets. |
| 2019 | Quetta Gladiators | Peshawar Zalmi | Quetta won by 8 wickets. |
| 2020 | Karachi Kings | Lahore Qalandars | Karachi won by 5 wickets |
| 2021 | Multan Sultan | Peshawar Zalmi | Multan won by 47 runs |
| 2022 | Lahore Qalandars | Multan Sultans | Lahore won by 42 runs |
| 2023 | Lahore Qalandars | Multan Sultans | Lahore won by 1 run |

## Medals won by Pakistanis in Olympics

- Pakistan has not won any Olympic medal in the last 6 Olympic Games which makes up to 24 years.
- In 2016 Rio de Janeiro Olympics Pakistan could only send 7 athletes and the Pakistani Hockey team could not make it for Olympics 2016.
- Pakistan has won three Gold medals in Olympics Hockey in Rome (1960), Mexico (1968) and Los Angeles (1984).
- As of 2019, Pakistan has won a total of 10 Olympics medals (3 Gold, 3 Silver and 4 Bronze medals.

| Sport | Gold | Silver | Bronze | Total |
|---|---|---|---|---|
| Hockey | 3 | 3 | 2 | 8 |
| Boxing | 0 | 0 | 1 | 1 |
| Wrestling | 0 | 0 | 1 | 1 |
| Total | 3 | 3 | 4 | 10 |

- Pakistan won the Asian Team Snooker Championship 2019. Babar Masih and Zulfiqar Qadir from Pakistan heated Aditya Mehta and Pankaj Advani from India in Asian Team Snooker held in Doha, Qatar.
- First women's ODI was played in 1973.
- Sana Mir is the first Pakistani female to take 100 wickets in ODI's.
- Paralympic Games are held for physically handicapped people

## Pakistan has won the following Cups in Various Sports

- Cricket World Cup 1992.
- T20 Cricket World Cup 2009.
- ICC Champions Trophy on 18th June 2017.
- Won Hockey World Cup 4 times (1971, 1978, 1982, and 1994).
- Pakistan has won 23 World Squash Team open titles. Jahangir Khan is a world-famous Pakistani Squash player. He has won the World Open six times and British open 1( times, setting a record.
- Pakistan has won two Blind Cricket World Cups.
- Ahmed Mujtaba from Quetta won a prestigious championship in Feather Weight class in Boxing.
- cueist Ahsan Ramzan bags IBSF World Snooker Championship

## List of Important Cups and Trophies

| | | |
|---|---|---|
| American Cup | Yacht Racing | USA |
| Ashes Cup | Cricket | Australia England |
| Asia Cup | Cricket, Badminton | Asia |
| Augusta Masters | Golf | International |
| Australian Open | Lawn Tennis | International |
| Azlan Cup | Hockey | International |
| BCS Trophy | Football | America |
| Benson and Hedges | Cricket | England and Wales |
| Bledisloe Cup | Rugby | Newzealand & Australia |
| Borg-Warner Trophy | Motorsports | Indianapolis America |
| British Open | Golf | International |
| Calcutta Cup | Rugby | England and Scotland |
| Champions trophy | Hockey | International |
| C.K. Naidu Trophy | Cricket | India |
| Colombo Cup | Football | International |
| Commissioner's Trophy | Baseball | America |
| Davis Cup | Tennis | International |
| Confederation Cup | Football | International |
| Derby | Horse Racing | International |
| European Cup | Badminton | Europe |
| European Champion Clubs' Cup | Football | International |
| Ezra Cup | Polo | India |
| FIFA World Cup Trophy | Football | International |
| French Open | Lawn Tennis | International |
| Gavaskar Border Trophy | Cricket | India and Australia |
| Grey Cup | Football | US & Canada |
| Gillette Cup | Cricket | India |
| Harilela Cup | Badminton | India |
| Heineken Cup | Lawn Tennis | International |
| Heisman Trophy | Football | America |
| Hopman Cup | Lawn Tennis | International |
| Jawaharlal Nehru Cup | Cricket | International |
| Jules Rimet Trophy | Football | International |
| Kalinga Cup | Football | India |
| Kings Cup | Air Races | England |
| Larry O'Brien Championship Trophy | Basketball | America |
| League Championship Trophy | Football | International |
| Liners Open | Golf | International |
| Malaysian Open | Badminton | International |
| Mann Cup | Lacrosse | America |
| McClelland Trophy | Football | Australia |
| Merdeka Cup | Football | Asia |
| MLS Cup | Soccer | America |
| Old Oaken Bucket | Football Intercollege | America |
| Premier League Trophy | Football | International |
| Prince of Wales Cup | Golf | England |
| Rothmans Cup | Cricket | International |
| Sahara Cup | Cricket | Pakistan and India |
| Sharjah Cup | Cricket | International |
| Singer Cup | Cricket | India, Sri Lanka and Pakistan |
| Stanley Cup | Hockey | America |
| Swaythling Cup | Table Tennis | World |
| Tata Open | Lawn Tennis | International |
| The Scottish Cup | Football | International |
| Thomas Cup | Badminton | World |
| Titan Cup | Cricket | South Africa, Australia and India. |
| U. Thant Cup | Tennis | International |
| Uber Cup | Badminton (Women) | World |
| UEFA Champions League | Football | International |
| US Masters | Golf | International |
| US Open | Lawn Tennis | International |
| Vince Lombardi Trophy | Super Bowl | America |
| Vittal Trophy | Football | India |
| Walker Cup | Golf | England |
| Webb Ellis Cup | Rugby | World |
| Wellington Cup | Horse Racing | New Zealand |
| West Chester Cup | Polo | England |
| Wills Trophy | Cricket | Pakistan, Sri Lanka and Zimbabwe |
| Wimbledon | Tennis | International |
| Wisden Trophy | Cricket | England and West Indies |
| World Cup | Hockey, Football, Cricket | World |

## Lengths of Fields Related to Different Sports

| Sport | Length |
|---|---|
| Cricket Pitch | A cricket pitch is rectangular in shape having an area of 22 yards (3.05m wide and 20.12m in length).<br>Batting crease is marked at 1.22m from stumps on either side.<br>Stumps at either side tend to be 71.1cm high. |
| Length of Table Tennis table | 2.74m |
| Length of Football penalty area | 16.5m |
| Tennis Court | 78 feet long and 27 feet wide |
| Hockey Field | Length: 229 feet,10 inches<br>Width: 180 feet, 5 inches |

## Top Five fastest persons of the world in 200 meters race

| Rank | Time | Athlete |
|---|---|---|
| 1 | 19.19 | Usain Bolt |
| 2 | 19.26 | Yohan Blake |
| 3 | 19.32 | Michael Johnson |
| 4 | 19.50 | Noah Lyles |
| 5 | 19.53 | Walter Dix |

## Some Famous Athletes

| Sport | Athletes |
|---|---|
| Football | Christian Ronaldo (Portugal), Messi (Argentina), Saleh (Egypt), Ronaldinho (Brazil), Neymar (Brazil) |
| Cricket | Imran Khan (Pakistan), Wasim Akram (Pakistan), Shoib Akhtar (Pakistan), Shane Warne (Australia), Brian Lara (West Indies), Don Bradman (Australia), Muttiah Murali Dharan (Sri Lanka), Garfield Sobers (West Indies), Viv Richards (West Indies). |
| Hockey | Dhyan Chand (India), Ric Charlesworth (Australia), Sohail Abbas (Pakistan), Akhtar Rasool (Pakistan), Hanif Khan (Pakistan) |
| Squash | Jahangir Khan (Pakistan), Hashim Khan (Pakistan), Peter Nicol (Scotland), Chris Ditmar (Australia). |
| Tennis | Roger Federer (Switzerland), Rod Laver (Australia), Novak Djokovic (Serbia), Rafael Nadal (Spain) |

## Official Names of Playgrounds

| Sports | Playground name | Origin of Sport |
|---|---|---|
| Baseball | Diamond | USA |
| Cricket | Stadium | England |
| Wrestling | Ring | Greece |
| Hockey, Football | Field | Football: England, Field hockey: British Isles |
| Tennis, Badminton, Netball | Court | Tennis: France |
| Judo, Karate, Taekwondo | Mat | Karate: Korea, Judo: Japan, |
| Golf | Course | Scotland |
| Boxing, Skating | Ring | Boxing: First recorded match took place in Britain |
| Ice Hockey | Rink | First played in: Canada |
| Cycling | Velodrome | |

## Chairpersons of International Cricket Council (ICC)

1. Narayanaswami Srinivasan, India, 26 July 2014 to 9 November 2015
2. Shashank Manohar, India, 22 November 2015 to 30 June 2020
3. Imran Khwaja, Singapore, 1 July 2020 to 23 November 2020
4. Greg Barclay, New Zealand

## CEO International Cricket Council (ICC)

| | |
|---|---|
| Malcolm Speed | (2001-2008) |
| Haroon Logat | (2008-2012) |
| David Richardson | (2012-2019) |
| Manu Sawhney | (Incumbent) |
| Geoff Allardice | (2021) |

## CHAMPIONS TROPHY WINNERS

| Year | Winner | Runner-up | Host | Format |
|---|---|---|---|---|
| 1998 | South Africa | West Indies | Dhaka, Bangladesh | Knockout |
| 2000 | New Zealand | India | Nairobi, Kenya | Knockout |
| 2002 | India and Sri Lanka | | Sri Lanka | Round Robin |
| 2004 | West Indies | England | England | Round Robin |
| 2006 | Australia | West Indies | India | Round Robin |
| 2009 | Australia | New Zealand | South Africa | Round Robin |
| 2013 | India | England | England | Round Robin |
| 2017 | Pakistan | India | England | Round Robin |

## Greatest Cricketers of the World

| Name | Country | Experience |
|---|---|---|
| MS Dhoni | India | 2 |
| Brian Lara | West Indies | 1990-2007 |
| Sachin Tendulkar | India | 1989-2013 |
| Brett Lee | Australia | 1999-2012 |
| Adam Gilchrist | Australia | 1996-2008 |
| Chris Gayle | West Indies | 1999-present |
| Steve Waugh | Australia | 1985-2004 |
| Inzamam Ul Haq | Pakistan | 1991-2007 |
| Ricky Ponting | Australia | 1995-2012 |
| Shane Warne | Australia | 1992-2007 |
| Jacques Kallis | South Africa | 1995-2014 |
| Sir Vivian Richards | West Indies | 1974-1991 |
| Sir Don Bradman | Australia | 1928-1948 |
| AB de Vulliers | South Africa | 2004-2018 |
| Dale Steyn | South Africa | 2004-2021 |
| Shakib Al Hasan | Bangladesh | 2006-present |
| Tamim Iqbal | Bangladesh | 2007-present |
| Abdur Razzak | Bangladesh | 1996-2013 |
| Mohammad Nabi | Afghanistan | 2009-present |
| Imran Khan | Pakistan | 1971-1992 |
| Shoaib Akhtar | Pakistan | 1997-2011 |
| Sourav Ganguly | India | 1992-2008 |
| Virat Kohli | India | 2008-present |

## Top Five Fastest 1000 runs in T20

1. Babar Azam
2. Virat Kohli
3. Aaron Finch
4. KL Rahul
5. Kevin Pietersen

## International Cricket Grounds in Ireland

| Ground | Location | Capacity |
|---|---|---|
| Clontarf Cricket Club Ground (Castle Avenue) | Dublin | 3200 |
| Civil Service Cricket Club Ground (Stormont) | Belfast | 7000 |
| Malahide Cricket Club Ground (The Village) | Malahide | 11,500 |
| Bready Cricket Club Ground | Magheramason | 3000 |

## Highest career batting average

| Rank | Country Batter | Tests | Inng | Runs | Ave | Period |
|---|---|---|---|---|---|---|
| 1 | Australia Don Bradman | 52 | 80 | 6,996 | 99.94 | 1928–48 |
| 2 | Australia Adam Voges | 20 | 31 | 1,485 | 61.87 | 2015–16 |
| 3 | South Africa Graeme Pollock | 23 | 41 | 2,256 | 60.97 | 1963–70 |
| 4 | West Indies George Headley | 22 | 40 | 2,190 | 60.83 | 1930–54 |
| 5 | England Herbert Sutcliffe | 54 | 84 | 4,555 | 60.73 | 1924–35 |

## Most Hundreds in ODI

| Player | Span | Mat | Inns | Runs | HS | Ave | SR | 100 |
|---|---|---|---|---|---|---|---|---|
| Sr tendulkar (India) | 1989-2012 | 463 | 452 | 18426 | 200* | 44.83 | 86.23 | 49 |
| V Kohli (India) | 2008-2022 | 265 | 256 | 12471 | 183 | 57.47 | 92.92 | 44 |
| Rt ponting (aus/icc) | 1995-2012 | 375 | 365 | 13704 | 164 | 42.03 | 80.39 | 30 |
| RG Sharma (india) | 2007-2022 | 230 | 223 | 9283 | 264 | 48.60 | 89.01 | 29 |
| St Jayasuriya (asia/sl) | 1989-2011 | 445 | 433 | 13430 | 189 | 32.36 | 91.2 | 28 |
| Hm Amla (sa) | 2008-2022 | 181 | 178 | 8113 | 159 | 49.46 | 88.39 | 27 |

## List of Coaches of Australian Cricket Team

| Coach | Years |
|---|---|
| Bob Simpson | 1986-96 |
| Geoff Marsh | 1996-99 |
| John Buchanan | 1999-2007 |
| Tim Nielsen | 2007-11 |
| Mickey Arthur | 2011-13 |
| Darren Lehmann | 2013-18 |
| Justin Langer | 2018-2022 |
| Andrew McDonald | 2022-present |

## Top Five Batsmen in Test Cricket (Runs)

| Player | Span | Runs |
|---|---|---|
| SR Tendulkar (INDIA) | 1989-2013 | 15921 |
| RT Ponting (AUS) | 1995-2012 | 13378 |
| JH Kallis (ICC/SA) | 1995-2013 | 13289 |
| R Dravid (ICC/INDIA) | 1996-2012 | 13288 |
| AN Cook (ENG) | 2006-2018 | 12472 |

## National Sports of some Countries

| Country | National Sport |
|---|---|
| Bhutan | Archery |
| Bangladesh | Kabaddi |
| Chile | Chilean rodeo |
| China | Table Tennis |
| Cuba | Baseball |
| Czech Republic | Ice Hockey |
| England | Football |
| Estonia | Basketball |
| Gambia | Wrestling |
| Haiti | Football |
| Hungary | Football, Water polo |
| Iceland | Handball |
| India | Field Hockey |
| Israel | Football |

| | |
|---|---|
| Italy | Football |
| Jamaica | Cricket |
| Japan | Sumo wrestling, baseball |
| Lithuania | Basketball |
| Madagascar | Rugby Union |
| Poland | Football |
| Nepal | Volleyball |
| Pakistan | Field hockey |
| Scotland | Golf |
| Spain | Football |
| Sri Lanka | Volleyball |
| United States | Baseball |
| Venezuela | Baseball |

## Winter Olympics

| City | Country | Year |
|---|---|---|
| Milan and Cortina d'Ampezzo | Italy | 2026 |
| Beijing | China | 2022 |
| Pyeong Chang | South Korea | 2018 |
| Sochi | Russia | 2014 |
| Vancouver | Canada | 2010 |
| Torino | Italy | 2006 |
| Salt Lake City | United States | 2002 |
| Nagano | Japan | 1998 |
| Lillehammer | Norway | 1994 |
| Albertville | France | 1992 |
| Calgary | Canada | 1988 |
| Sarajevo | Yugoslavia | 1984 |
| Lake Placid | United States | 1980 |
| Innbruck | Austria | 1976 |

## Venues of Commonwealth Games

| Year | City | Country |
|---|---|---|
| 2022 | Birmingham | England |
| 2018 | Gold Coast | Australia |
| 2014 | Glasgow | Scotland |
| 2010 | Delhi | India |
| 2006 | Melbourne | Australia |
| 2002 | Manchester | England |
| 1998 | Kuala Lumpur | Malaysia |
| 1994 | Victoria | Canada |
| 1990 | Auckland | New Zealand |
| 1986 | Edinburgh | Scotland |
| 1982 | Brisbane | Australia |
| 1978 | Edmonton | Canada |
| 1974 | Christchurch | New Zealand |
| 1970 | Edinburgh | Scotland |
| 1966 | Kingston | Jamaica |
| 1962 | Perth | Australia |
| 1958 | Cardiff | Wales |
| 1954 | Vancouver | Canada |
| 1950 | Auckland | New Zealand |
| 1938 | Sydney | Australia |
| 1934 | London | England |
| | | Canada |

## Asia Cricket Cup Venues and Winners

| Venue | Year | Winner |
|---|---|---|
| Sharjah, UAE | 1984 | India |
| Sri Lanka | 1986 | Sri Lanka |
| Bangladesh | 1988 | India |
| India | 1990/91 | India |
| Sharjah, UAE | 1995 | India |
| Sri Lanka | 1997 | Sri Lanka |
| Bangladesh | 2000 | Pakistan |
| Sri Lanka | 2004 | Sri Lanka |
| Pakistan | 2008 | Sri Lanka |
| Sri Lanka | 2010 | India |
| Bangladesh | 2012 | Pakistan |
| Bangladesh | 2014 | Sri Lanka |
| Bangladesh | 2016 | India |
| UAE | 2018 | India |
| UAE | 2022 | Sri Lanka |

## FIFA World Cup Venues and Winners

| Year | Venue | Winner |
|---|---|---|
| 2026 | Canada, Mexico, United States | --- |
| 2022 | Qatar | Argentina |
| 2018 | Russia | France |
| 2014 | Brazil | Germany |
| 2010 | South Africa | Spain |
| 2006 | Germany | Italy |
| 2002 | Jana, South Korea | Brazil |
| 1998 | France | France |
| 1994 | United States | Brazil |
| 1990 | Italy | West Germany |
| 1986 | Mexico | Argentina |
| 1982 | Spain | Italy |
| 1978 | Argentina | Argentina |

## Winter Olympics Games Venues

| Year | Venue |
|---|---|
| 1972 | Japan |
| 1976 | Austria |
| 1980 | United States |
| 1984 | Yugoslavia |
| 1988 | Canada |
| 1992 | France |
| 1994 | Norway |
| 1998 | Japan |
| 2002 | United States |
| 2006 | Italy |
| 2010 | Canada |
| 2014 | Russia |
| 2018 | South Korea |
| 2022 | China |
| 2026 | Italy |
| 2030 | India |

## Summer Olympics Games Venues

| Year | Venue |
|---|---|
| 1972 | Germany |
| 1976 | Canada |
| 1980 | Soviet Union |
| 1984 | United States |
| 1988 | South Korea |
| 1992 | Spain |
| 1996 | United States |
| 2000 | Australia |
| 2004 | Greece |
| 2008 | China |
| 2012 | United Kingdom |
| 2016 | Brazil |
| 2020 | Japan |
| 2024 | France |
| 2028 | United States |

## ICC Men's T20 World Cup Venues and Winners

| Year | Venue | Winner |
|---|---|---|
| 2022 | Australia | England |
| 2016 | India | West Indies |
| 2014 | Bangladesh | Sri Lanka |
| 2012 | Sri Lanka | West Indies |
| 2010 | West Indies | England |
| 2009 | England | Pakistan |
| 2007 | South Africa | India |

## Cricket World Cup Venues and Winners

| Year | Venue | Winner |
|---|---|---|
| 1975 | England | West Indies |
| 1979 | England | West Indies |
| 1983 | England, Wales | India |
| 1987 | India, Pakistan | Australia |
| 1992 | Australia, New Zealand | Pakistan |
| 1996 | India, Pakistan, Sri Lanka | Sri Lanka |
| 1999 | England, Scotland, Ireland, Netherland, Wales | Australia |
| 2003 | South Africa, Zimbabwe, Kenya | Australia |
| 2007 | West Indies | Australia |
| 2011 | India, Sri Lanka, Bangladesh | India |
| 2015 | Australia, New Zealand | Australia |
| 2019 | England, Wales | England |
| 2023 | India | ---- |

## Men's Hockey World Cup winners list

| Country | Year |
|---|---|
| Pakistan | 1971 |
| Netherlands | 1973 |
| India | 1975 |
| Pakistan | 1978 |
| Australia | 1982 |
| Netherlands | 1986 |
| Pakistan | 1990 |
| Netherlands | 1994 |
| Germany | 1998 |
| Germany | 2002 |
| Australia | 2006 |
| Australia | 2010 |
| Belgium | 2014 |
| Germany | 2018 |
| | 2023 |

## Quick facts (Sports):

- Willow tree's wood is used to manufacture bat. Cricket ball is made of a core of cork.
- Misbah ul Haq has been appointed as Head Coach of Pakistan International Cricket Team. Misbah ul Haq announced retirement from all formats on 14 May 2017 after the West Indies tour.
- Younis Khan is the first Pakistani cricketer to score 10,000 runs. He completed 10,000 scores in a match against West Indies. He played his last test match against West Indies on 10 May 2017 at Roseau. He retired from ODI format on 11 November 2015. He retired from T20 in 2009.
- Shahid Afridi retired from Test Cricket in July 2010, from ODI in 2015 and he retired from T20 in February 2017
- Taekwond: It has been developed in Korea over 20 centuries and it's a form of free fighting in which the players use their bare hands and feet.
- The International Hockey Federation was established in 1924.

## ICC Cricket World Cups (the hosts, the winning countries, and Pakistan's performance/progress in each tournament:

| Year | Host | Winners | Pakistan's Performance |
|---|---|---|---|
| 1975 | England | West Indies | Group stage elimination |
| 1979 | England | West Indies | Semi-finalists |
| 1983 | England | India | Semi-finalists |
| 1987 | India/Pakistan | Australia | Semi-finalists |
| 1992 | Australia/New Zealand | Pakistan | Champions |
| 1996 | Pakistan/India/Sri-Lanka | Sri Lanka | Quarter-finalists |
| 1999 | England & Wales | Australia | Runners-up |
| 2003 | South Africa | Australia | Group stage elimination |
| 2007 | West Indies | Australia | Group stage elimination |
| 2011 | India/Sri-Lanka/Bangladesh | India | Semi-finalists |
| 2015 | Australia/New Zealand | Australia | Quarter-finalists |
| 2019 | England & Wales | England | Group stage elimination |

## Captains of Pakistan Cricket Teams (Men's) in Tests, ODIs, and T20Is

Note: Babar Azam currently serves as the Captain for all three formats

| Sr | Tests | ODIs | T20Is |
|---|---|---|---|
| 1 | Abdul Hafeez Karadar | Intikhab Alam | Inzamam-ul-Haq |
| 2 | Fazal Mahmood | Asif Iqbal | Younus Khan |
| 3 | Imtiaz Ahmed | Majid Khan | Shoaib Malik |
| 4 | Javed Burki | Mushtaq Muhammad | Misbah-ul-Haq |
| 5 | Hanif Muhammad | Wasim Bari | Shahid Afridi |
| 6 | Saeed Ahmed | Javed Miandad | Mohammad Hafeez |
| 7 | Intikhab Alam | Zaheer Abbas | Sarfraz Ahmed |
| 8 | Majid Khan | Imran Khan | Babar Azam |
| 9 | Mushtaq Muhammad | Sarfraz Nawaz | Shadab Khan |
| 10 | Wasim Bari | Abdul Qadir | - |
| 11 | Asif Iqbal | Saleem Malik | - |
| 12 | Javed Miandad | Rameez Raja | - |
| 13 | Imran Khan | Wasim Akram | - |
| 14 | Zaheer Abbas | Waqar Younis | - |
| 15 | Wasim Akram | Moin Khan | - |
| 16 | Waqar Younis | Saeed Anwar | - |
| 17 | Saleem Malik | Aamer Sohail | - |
| 18 | Rameez Raja | Rashid Latif | - |
| 19 | Saeed Anwar | Inzaman-ul-Haq | - |
| 20 | Aamer Sohail | Mohammad Yousuf | - |
| 21 | Rashid Latif | Younus Khan | - |
| 22 | Moin Khan | Abdul Razzaq | - |
| 23 | Inzamam-ul-Haq | Shoaib Malik | - |
| 24 | Mohammad Yousuf | Misbah-ul-Haq | - |
| 25 | Younus Khan | Shahid Afridi | - |
| 26 | Shoaib Malik | Azhar Ali | - |
| 27 | Shahid Afridi | Sarfraz Ahmed | - |
| 28 | Salman Butt | Mohammad Hafeez | - |
| 29 | Misbah-ul-Haq | Imad Wasim | - |
| 30 | Mohammad Hafeez | Babar Azam | - |
| 31 | Azhar Ali | - | - |
| 32 | Sarfraz Ahmed | - | - |
| 33 | Mohammad Rizwan | - | - |
| 34 | Babar Azam | - | - |

## Captains of the Pakistan's Women's ODI team over the years:

| Sr. # | Name |
|---|---|
| 1 | Shaiza Khan |
| 2 | Sadia Butt |
| 3 | Sana Javed |
| 4 | Urooj Mumtaz |
| 5 | Sana Mir |
| 6 | Bismah Maroof |
| 7 | Javeria Khan |
| 8 | Nida Dar |

## History & Records

### Some prominent records by Pakistani sports professionals:

- Pakistan's Jansher Khan has a record eight titles of the World Open to his name. He also equaled the record of Jahangir Khan for most successive World Open titles, when he lifted the trophy five consecutive times from 1992-1996.
- The former Pakistan Hockey Team Captain, Sohail Abbas is the highest goal scorer of all time with 348 goals. He is the first player in the history of international hockey to score more than 300 goals. He scored 60 times in 1999, a record for the most number of goals in a year. He is also the fastest to score 100 and 200 goals. Another unique record to his name is that he has scored one double hat trick and 21 hat tricks in international hockey.
- Jahangir Khan holds the record for the longest winning streak in squash. He went on to win 555 consecutive matches, over a period of five years and eight months (1981-1986). It also the longest winning streak by any athlete in top-level professional sports. Jahangir Khan is also the youngest squash player in history to win the World Open Championship in 1981, defeating Australia's Geoff Hunt in Toronto, Canada, at age 17.
- Shahid Khan Afridi, in his debut innings, set a world record by scoring a century off just 37 balls against Sri Lanka at Nairobi, which was recorded as the fastest limited-overs century back then. The record lasted for more than 17 years and was eventually broken by New Zealand's Corey Anderson, who scored a century off 36 balls against West Indies on January 1, 2014 at Queenstown. Anderson's record lasted just over a year, as South Africa's AB de Villiers scored an hundred against West Indies off just 31 balls at Johannesburg on January 18, 2015.
- Pakistan's Hockey Team is the most successful team in the men's Hockey World Cup, winning four titles. The Green Shirts won the first ever Hockey World Cup in 1971, when they defeated Spain 1-0 in Barcelona, Spain. The second victory came in 1978, when Pakistan defeated the Netherlands with a 3-2 triumph. The third one came on Indian soil in 1982, when they defeated West Germany 3-1 in the final. The fourth title win came in 1994, when Pakistan again defeated the Netherlands in Sydney, Australia. The Pakistan hockey team also has the most number of gold medals at the Asian Games, winning a record eight times in just fifteen tournaments.
- On May 21, 1997, Pakistan opener Saeed Anwar scored the highest number of runs in an innings by a player in an ODI match, when he struck 194 runs against India in Chennai. The record lasted for about 13 years, when on February 24, 2010, India's Sachin Tendulkar broke his record against South Africa in India. The current record for the longest innings in the 50-over format is held by India's Rohit Sharma, as he scored 264 runs against Sri Lanka in 2014.

- On November 2, 2014, Misbah ul Haq scored a century off 56 balls and equaled the record for the fastest century in Tests with Sir Vivian Richards' record. The record was then broken by New Zealand's Brendon McCullum in 2016, when he scored 100 runs from 54 balls against Australia at Christchurch, New Zealand.
- On February 25, 2003, Wasim Akram became the first man in the history of Cricket to take 500 One-Day international wickets.
- Pakistan's Mohammad Yousuf holds the record for the most number of runs scored in a calendar year in Tests. He scored 1788 in 11 tests at the average of 99.33 in 2006.
- Former Pakistan pacer Jalal-Ud-din was the first bowler in international cricket to take a hat-trick in ODI in 1982.
- Hanif Mohammad holds the record for the longest Test innings in terms of minutes. He batted for 970 minutes (16.16 hours) against West Indies in 1958.
- Former Pakistan fast bowler Shoaib Akhtar bowled the fastest recorded ball in the history of cricket against England in a World Cup match at South Africa in 2003. The last ball of his second over was recorded at 161.3km/h or 100.2mph, which bettered his previous mark of 161.0km/h from April 2002.
- The youngest players to take a hat-trick in all three forms of the game are from Pakistan. In ODIs, Aqib Javed took a hat-trick at 19 years and 81 days, against India in 1991. In Tests, Naseem Shah took a hat-trick at just 16 years and 359 days, against Bangladesh in 2020. In T20Is, Mohammad Hasnain became the youngest to take a hat-trick at 19 years and 183 days of age, against Sri Lanka in 2019.
- In ODIs, Pakistan team has the second most number of hat-tricks taken by a team with eight hat-tricks. In these eight, two each were taken by Wasim Akram and Saqlian Mushtaq.
- The former Pakistani right-handed batsman, Hasan Raza holds the record for the youngest ever Test cricketer. He debuted at the age of fourteen years against Zimbabwe in Faisalabad, in October 1996.

## Prominent events/victories in Pakistan's sporting history:

- 1960: Pakistan Hockey team won Gold in the Rome Olympics.
- 1968: Pakistan Hockey team won its second Gold medal in the Summer Olympics at Mexico.
- 1971: Pakistan Hockey team won the first ever Hockey World Cup.
- 1978: Pakistan Hockey team won its second Hockey World Cup.
- 1982: Pakistan Hockey team won its third Hockey World Cup.
- 1984: Pakistan Hockey team won its third Gold medal in the Los Angeles Olympics.
- 1994: Pakistan Hockey team won its fourth Hockey World Cup.
- 25 March 1992: Pakistan Cricket Team won the Cricket World Cup by defeating England in the final by 22 runs.
- 21 June 2009: Pakistan Cricket Team, under the captaincy of Younis Khan, won the ICC World Twenty20 in England by defeating Sri Lanka by eight wickets in the final.
- 18 June 2017: Pakistan Cricket Team won the ICC Champions Trophy by defeating India in the final by 180 runs.

## Pakistan's performance at the Commonwealth Games:

| Game Number | Games | Gold | Silver | Bronze | Total |
|---|---|---|---|---|---|
| 5th | 1954 Vancouver | 1 | 3 | 2 | 6 |
| 6th | 1958 Cardiff | 3 | 5 | 2 | 10 |
| 7th | 1962 Perth | 8 | 1 | 0 | 9 |
| 8th | 1966 Kingston | 4 | 1 | 4 | 9 |
| 9th | 1970 Edinburgh | 4 | 3 | 3 | 10 |
| 14th | 1990 Auckland | 0 | 0 | 0 | 0 |
| 15th | 1994 Victoria | 0 | 0 | 3 | 3 |
| 16th | 1998 Kuala Lumpur | 0 | 1 | 0 | 1 |
| 17th | 2002 Manchester | 1 | 3 | 4 | 8 |
| 18th | 2006 Melbourne | 1 | 3 | 1 | 5 |
| 19th | 2010 Delhi | 2 | 1 | 2 | 5 |
| 20th | 2014 Glasgow | 0 | 3 | 1 | 4 |
| 21st | 2018 Gold Coast | 1 | 0 | 4 | 5 |
| 22nd | 2022 Birmingham | 2 | 3 | 2 | 7 |
| Total | | 27 | 27 | 28 | 82 |

## Pakistan Cricket Team highest and lowest scores in each format:

- Pakistan's lowest ever ODI total was 43 against the West Indies in 1992.
- The highest ODI total for Pakistan is 399 against Zimbabwe in 2018.
- Pakistan's lowest Test total was 49 against South Africa in 2013.
- Pakistan's highest Test total was 765 against Sri Lanka in 2009.
- Pakistan's highest T20I score was 205 against West Indies in 2018.

- Pakistan lowest T20I score was 74 against Australia in 2012.

## Miscellaneous facts about Pakistan Sports

- The Lahore Marathon is an annual road marathon held in Lahore, Pakistan since 2005. The main event is a traditional 42.195 km marathon race. Approximately 26,000 people participated in the Lahore Marathon in total in 2007, making it one of the major marathons of the world.
- The city of Sialkot has been producing sporting goods for more than 100 years. The first record of manufacturing of sports goods in Sialkot can be traced back to 1883 with the products such as cricket bats, hockey sticks, polo sticks etc. In 1918, a football was added and was supplied to British Army stationed at Singapore. Presently the Sports Goods Industry of Sialkot is supplying products to almost every country of the world, directly or indirectly. The products are mostly made for international markets and have received worldwide recognition. World renowned brands such as Adidas, Nike, Puma etc source large portion of their supplies of sports goods from Sialkot.
- At Sialkot, more than 200,000 people are directly employed in the sports goods sector exporting sports goods worth US$ 450 million annually from around 2,400 companies.
- Sialkot caters more than 70% of total world demand for hand-stitched inflatable soccer balls i.e. around 40 million balls annually worth US$ 210 million. During the peak season, which repeats after 4 years on the occasion of FIFA World Cup, the production of inflatable balls exceeds 60 million per annum. These balls are produced by a workforce of around 60,000. In addition to sporting goods, Sialkot is also the world's largest center of surgical instrument manufacturing.
- Tragically run-out on 199 against India in 2006.
- Nazar Mohammad was a Pakistani cricketer. In October 1952, in Pakistan's second Test match and first Test victory, he became the first player to score a Test century for Pakistan, and the first player to remain on the ground for an entire Test match. An opening batsman, he carried his bat for his score of '124 not out' in Pakistan's innings victory over India, batting for 8 hours 35 minutes. His son, Mudassar Nazar also played for Pakistan.
- Wallis Mathias was a former right-handed middle order batsman, who played in 21 Tests for Pakistan from 1955 to 1962. A Catholic, he was the first non-Muslim cricketer to play for Pakistan. He belonged to Karachi's Goan community.
- Mohammad Hafeez, a right-handed battling all-rounder, is the first Pakistani to score 1000 runs in T20Is.
- Younis Khan has scored the most runs (10,099) for Pakistan in Test cricket—the first and only player to score over 10,000 runs in the format for Pakistan.
- Inzamam ul Haq, with 11,739 runs, is the highest scorer for Pakistan in ODIs.
- Wasim Akram with 502 wickets in ODIs and 414 wickets in Tests, is the highest wicket taker for Pakistan in both formats as well as overall.
- The former Pakistan batsman, Zaheer Abbas, is popularly known as the "Asian Don Bradman."
- Two Pakistani batsmen have been dismissed on 199 in Tests. The first was Mudassar Nazar against India in 1984, who became the first batsman in the history of Test Cricket to be dismissed on 199. The second is Younis Khan, who was

- **Cricket diplomacy between India and Pakistan:** Cricket has been a source of diplomacy for the two countries throughout their short histories, Former Pakistani President General Zia-ul-Haq started it all with this "cricket for peace initiative." When he went to India to watch a test match between the two sides in February 1987. In 2000, Hindu extremists dug up a cricket pitch in New Delhi to protest against the Pakistan Cricket Team's visit. Following the Kargil conflict and at various other times, there have also been calls to suspend cricketing ties between the two countries. In April 2005, Gen Pervez Musharraf, the then President of Pakistan, visited India to watch a cricket match and met Man Mohan Singh to revive talks on Kashmir.
- The Sri Lankan cricket team toured Pakistan in September and October 2019 to play three ODIs and three T20Is.The tour originally had two Test matches scheduled to take place, but these were moved to December 2019. The series holds historic significance, as it was the first time in ten years that Test cricket was played in Pakistan.
- Muhammad Inam Butt was the only Pakistani to represent the country at the 2019 World Beach Games. He participated in Beach Wrestling (Men's 90 Kg), and won the Gold medal
- On July 17, 2016, Muhammad Waseem became the first Pakistani boxer to become the World Boxing Council (WBC) Silver flyweight Champion, by clinching the world silver belt by beating Jether Oliva of Philippines in Seoul.

## The Pakistan Super League (PSL)

The Pakistan Super League (PSL), founded on 9 September 2015, is a T20 cricket league played every year during February and March. It initially had five teams, but is now contested by six teams representing six cities in Pakistan. From 2021, The PSL will have an exclusive window in the ICC Future Tours Program. Some prominent details of the editions held so far.

- The first edition was played in 2016, and it was played entirely in the UAE. Islamabad United were the champions of this first edition.
- The final of the second edition was played in Gaddafi Stadium Lahore on 5th March 2017. This was the first time a PSL match was played in Pakistan. Peshawar Zalmi were crowned champions.
- The finals of the 2018 and 2019 editions were played in National Stadium Karachi, won by Islamabad United and Quetta Gladiators, respectively.

- The 2020 PSL was the first time that the league was played entirely in Pakistan. The final was delayed to the Covid-19 pandemic, and was played on 17 November 2020 at the National Stadium in Karachi, Pakistan, between the Karachi Kings and Lahore Qalandars. Karachi Kings defeated the Lahore Qalandars by five wickets to win their maiden PSL title.

- Pakistan Super League 2021 also known as PSL-6 was the sixth session of Pakistan Super League. This season was supposed to be held entirely in Pakistan. PCB Suspended tournament on 04 March after 14 Matches out of 30 due to covid-19. The remaining matches were played in U.A.E. Multan Sultan beaten Peshawar Zalmi in the final by 47 runs. Multan Sultan win this title first time.

# FIFA WORLD CUP 2022

- **FIFA world cup 2022 was held** in Qatar
- **Opening Ceremony of FIFA World Cup was held on** 20 Nov 2022
- FIFA world cup Final was played on **18 Dec. 2022 in Lusail Stadium in Lusail, Qatar.**
- **Winner** of FIFA world cup 2022 is **Argentina**
  Argentina won the final match with the following scores:
  Argentina 3, France 3 (Argentina won 4-2 on penalties).
- **Kylian Mbappe** (France) won the golden boot being the top scorer of the tournament. He scored **08 goals** in the world cup. Lionel Messi Scored 7 goals and become the 2nd top Scorer of the tournament.

| World Cup top Scorers 2022 | | | |
|---|---|---|---|
| No. | Player | Country | Goals |
| 1 | Kylian Mbappe | France | 8 |
| 2 | Lionel Messi | Argentina | 7 |
| 3 | Olivier Giroud | France | 4 |
| 3 | Julian Alvarez | Argentina | 4 |

- **Lionel Messie** Won the Golden Ball in FIFA World Cup 2022
- **Lionel Messi** (Argentina) has become the first man in history to win the **Golden Ball twice** at the FIFA World Cup. Messi had won the Golden Ball and scored 04 Goals in the 2014 world cup.

**Kylian Mbappe** (France) scored Hat-trick in World Cup-2022 Final against Argentine.

**Goncalo Ramos (Portugal)** has also scored Hat-trick in World Cup-2022 against Switzerland.

Argentina goalkeeper **Emi Martinez got the Golden Glove** for best goalkeeper after saving a penalty from Kingsley Coman in the shoot-out.

| | |
|---|---|
| **Silver Ball award** | Kylian Mbappe |
| **Bronze Ball award** | Luka Modric |
| **Silver Boot Award** | Lionel Messi |
| **Bronze Boot Award** | Olivier Giroud & Julian Alvarez |
| **Best Young Player of the tournament** | Enzo Fernandez |
| **FIFA fair play trophy** | England |

## PELE (Edson Arantes Do Nascimento)

- **Pele** was the famous player of Brazil National Team. Recently died at the age of 82 on 29 December 2022. **Pele** also served as minister of sports from 1995-1998 for his country (Brazil).

**SOME FAMOUS SOCCER PLAYERS**

| Player Name | Team |
|---|---|
| Lionel Messi | Argentine |
| Nymar | Brazil |
| Cristiano Ronaldo | Portugal |
| Robert Lewandowski | Poland |
| Diego Maradona | Argentine |
| Kylian Mbappé | France |
| Zinedine Yazid Zidane | France |
| Ricardo Kaká | Brazil |
| Mohamed Salah | Egypt |
| Luka Modrić | Croatia |

## TOP GOAL SCORER IN THE INTERNATIONAL MEN'S FOOTBALL

**Cristiano Ronaldo** of Portugal is the leading goal scorer in International Mens Football. He Scored **118 Goals** in International Matches.

**Ali Daei of Iran** is at No. 2 with **109 goals** in international matches.

**Lionel Messi of Argentine** is at No. 03 with **98 goals.**

# PAKISTAN STUDIES

## Political and Constitutional History of Pakistan

### Pre-Partition Timeline

- 1498 - Vasco da Gama reached India on May 20, 1498.
- 1600 - The East India Company was founded in the year 1600.
- 1607 - In 1607, William Hawkins, who was later given the title of "English Khan" by Jahangir, led the ship known as "Hector" for East India Company to Surat and Aden. He arrived in Surat in August 1608. He reached Agra in April 1609, and was received by the then emperor Jahangir.
- 1608: The British East India Company landed in the Indian subcontinent on the 24th of August 24, 1608, at the port of Surat. They came in the capacity of spice traders.
- 1757 - The Battle of Plassey took place on the 23rd of June. It was a decisive victory of the British East India Company, led by Robert Clive, over a much larger force of the Nawab of Bengal and his French allies. The battle helped the Company in seizing control over Bengal.
- 1767-1799 - Timeline of the Anglo-Mysore Wars:
- The First Anglo–Mysore War (1767–1769) was a conflict that took place in India. The war was fought between the Sultanate of Mysore and the East India Company. One of the causes of the war were the schemes of the Nizam of Hyderabad, Asaf Jah II, who attempted to divert the company's resources from attempts to gain control of the Northern Circars.
- The Second Anglo–Mysore War (1780-1784) was fought between the Kingdom of Mysore and the British East India Company. Mysore was a major French ally in India at the time, and the Britain-French conflict in the American Revolutionary War led to the Anglo–Mysore hostilities.
- The Third Anglo–Mysore War (1790–1792) was the third war between the Kingdom of Mysore and the East India Company. In addition, it involved the Maratha Empire, the Kingdom of Travancore, as well as the Nizam of Hyderabad.
- The Fourth Anglo–Mysore War (1798-1799) was the final war fought in in South India between the Kingdom of Mysore and the British East India Company.
- 1773 - The Regulating Act of 1773 (formally, the East India Company Act 1772) was an Act of the Parliament of Great Britain intended to overhaul the management of the East India Company's rule in India.
- 1784 - Pitt's India Act was enacted in 1784. It marked the first step towards British parliamentary control over the East India Company and centralized administration in India.
- 1819 - The Faraizi movement was a movement led and founded by Haji Shariatullah in Eastern Bengal, in 1819. The purpose of the movement was urge Muslims to give up 'un-Islamic practices' and innovations, and to act upon their duties as Muslims. The movement protected the rights of tenants.
- 1846-The Treaty of Amritsar, executed by the British East India Company and Raja Gulab Singh of Jammu after the First Anglo-Sikh War, established the princely state of Jammu and Kashmir under the suzerainty of the British Indian Empire.The British government sold Kashmir to Gulab Singh for 7.5 million Nanakshahee rupees. Gulab Singh was given the title of Maharaja, henceforth.
- 1849 - East India Company annexed the Punjab in April 1849 and incorporated it within British India.
- 1857 - The War of Independence was fought by Indians against the British. It is also known as the Indian Rebellion or Indian Mutiny. It began on 10 May 1857. It began as a mutiny from the sepoys of the East India Company's army Meerut. Other mutinies and civilian revolts soon broke out mostly in the upper Gangetic plain, central India, and farther north and east. The rebellion was eventually curbed with the rebels' defeat in Gwalior on the 20th of June, 1858. On the 1st of November 1858, the British granted amnesty to all rebels not involved in murder, though they did not declare the hostilities to have formally ended until 8 July 1859. Around 6000 British soldiers died.
- 1858 - (First railway tracks in the subcontinent): Work began on the first railway track in the subcontinent in April 1858 between Karachi and Kotri, a distance of 108 miles (174 km). The track was completed on 13 May 1861.
- 1858 - Bahadur Shah Zafar was exiled to Rangoon in British controlled Burma (now Myanmar).
- 1858 - The British government effectively abolished the East India Company in 1858, as an aftermath of the Rebellion of 1857. All of the powers, possessions and armed forces were taken over by the British government.
- 1859 – Sir Syed established Gulshan School at Moradabad.
- 1863 – Sir Syed opened the Victoria School at Ghazipur.
- 1864 – Scientific Society was founded by Sir Syed
- 1867 – Urdu – Hindi conflict occurred in the United Provinces of Agra and Oudh.
- 1869 - In 1869, Sir Syed went to England, along with his sons Syed Mahmood and Syed Hamed. There, he was awarded the Order of the Star of India from the British government on 6 August.
- 1875 – Muhammad Anglo-Oriental College was founded. Its Urdu name was Madrasatul Uloom Musalmanan-e-Hind.
- 1875 - Arya Samaj was founded in 1875 by Dayananda Sarasvati. It was a Hindu reform movement whose ultimate aim was to reestablish the Vedas, the earliest Hindu scriptures, as revealed truth.
- 1876 – On 25th December Quaid-e-Azam Muhammad Ali Jinnah born in Karachi.
- 1877 – On 9th November Allama Muhammad Iqbal born in Sialkot.

- 1881- The first synchronous census in India was held in 1881.
- 1885 – Indian National Congress was founded by retired Civil Servant Allan Octavian Hume. Its first session held in Bombay
- 1887 - In July 1887 Quaid-e-Azam Muhammad Ali Jinnah got enrolled in the Sindh Madressah tul Islam, and studied here till 1892.
- 1892 - The Indian Councils Act 1892 was an Act of British Parliament that introduced various amendments to the composition and function of legislative councils in British India. The act entailed provisions on the number of additional members to be represented in the central and provincial legislatures.
- 1893 - Quaid e Azam joined Lincoln's Inn in June 1893.
- 1893 - The Durand Line was established. It is a 2,640-kilometer (1,640-mile) long international border between Pakistan and Afghanistan. Originally, it was established as the border between the British India and the Emirate of Afghanistan. It was done by Mortimer Durand, a British diplomat of the Indian Civil Service, and Abdur Rahman Khan, the Afghan Emir.
- 1901 - The Northwest Frontier Province was created. It was annexed to India by the British after the Second Sikh War (1848–49), and remained a part of Punjab until its creation.
- 1905 – Partition of Bengal into West and East Bengal. It happened during the reign of Lord Curzon. East Bengal comprised of Muslim majority while in West Bengal Hindus dominated.
- 1906 - Simla Deputation under the leadership of Sir Agha khan III met Viceroy Minto on 1st October. The delegation had 35 members.
- 1906 - On 30th December All India Muslim League was founded in Dhaka. Nawab Khawaja Salimullah was its founder and Sir Agha Khan III was appointed as its first President.
- 1907 - The first annual session of the Muslim League was held in Karachi on 29 December 1907.
- 1907-1908 - In 1907, Allama Muhammad Iqbal moved to Germany to pursue his doctoral studies, and earned a Doctor of Philosophy degree from the Ludwig Maximilian University of Munich in 1908.
- 1908 - Syed Ameer Ali established the London Muslim League.
- 1909 - Minto-Morley Reforms took place. These reforms brought an increase in Indian involvement in governance matters.
- 1911- King George V announced the repealing of the Partition of Bengal in December 1911, at his Coronation Durbar in Delhi.
- 1911 - Partition of Bengal was annulled by Lord Hardinge
- 1911 - Maulana Muhammad Ali Jauhar launched 'The Comrade', from Calcutta, on the 14th of January, 1911.
- 1913 - The All-India Muslim League adopted self-government for India as its goal.
- 1913 - Quaid-e-Azam joined Muslim League in October of this year, after leaving Congress and after being convinced by Maulana Muhammad Ali Johar.
- 1913 - Kanpur Mosque Tragedy took place.
- 1914–18 - World War-I was fought. In this war, Germany, Austria-Hungary, Bulgaria, and the Ottoman Empire (the Central Powers) fought against Great Britain, France, Russia, Italy, Romania, Japan, and the United States (the Allied Powers).
- 1916 - Sir Mian Fazl-i-Hussain, a Congress politician, was elected to the Punjab Legislative Council in the seat reserved for the University of the Punjab.
- 1916 - An agreement known as Lucknow Pact was signed between Indian National Congress and All India Muslim League at the joint session of Lucknow. Congress agreed for separate electorates for Muslims in this Lucknow Pact.
- 1916 - Quaid E Azam was awarded the title of 'Hindu Muslim Unity' by Sarojni Naidu.
- 1919 – On April 13, Acting Brigadier General of British Indian Army Reginald Dyer ordered to open fire on a crowd of civilians. The incident is known as the Jallianwala Bagh massacre or Amritsar massacre. Almost 400 were killed including 41 children in this incident.
- 1919- Quaid e Azam resigned from the membership of imperial legislative Council on account of Rowlatt Act.
- 1919 - An act was passed by the British Parliament for constitutional reforms in India. This act was named as Montagu-Chelmsford Reforms.
- 1919–24 - Khilafat Movement was started by Muslims of India to protect the authority of the Ottoman Empire. The leaders of this movement were Maulana Muhammad Ali Jauhar, Shaukat Ali, and Abul Kalam Azad.
- 1921 - The Moplah Rebellion (aka Moplah Riots of 1921), led by Variyamkunnath Kunjahammed Haji, were riots by the community of Mappila Muslims from the Kerala area during the 19th and early 20th centuries, against the Hindu landlords in Malabar (located in North Kerala), and the British.
- 1926 - Allama Iqbal was elected Member of the Punjab Legislative Assembly for three years.
- 1927 - Delhi-Muslim Proposals were proposed by the leaders of All India Muslim League to gulf the bridge between Congress and the Muslim League.
- 1927 – Simon Commission or Indian Statutory Commission under the chairmanship of Sir John Simon was appointed by the British Government in Nov 1927. It arrived in India in 1928. It had seven members.
- 1928 – Nehru Report was presented in the fourth session of the All Parties Conference.
- 1929 – In response to the Nehru Report, Muhammad Ali Jinnah presented his proposal in the form of fourteen points in a meeting of the council of All India Muslim League on 28th March.
- 1930 - Simon Commission Report was presented consisting of two volumes.
- 1930 - A strong Punjabi group separated from the Congress and formed "Majlis-e-Ahrar-ul-Islam".
- 1930 – Allama Muhammad Iqbal delivered a speech during the 25th annual session of the All India Muslim League at Allahabad.
- 1930 – In March, the Civil Disobedience Movement started by Mahatma Gandhi through Dandi March or Salt March. 78 other members also accompanied him in this march.

- 1930 – First Round Table Conference held in London from Nov 12, 1930, to Jan 19, 1931.
- 1931 – Gandhi-Irwin Pact signed between Mahatma Gandhi and Lord Irwin. It was signed before the Second Round Table Conference.
- 1931 – Second Round Table Conference held in London from Sep 7, 1931, to Dec 1, 1931.
- 1931 – Kashmir Agitation Movement started on 13th July during the trial of Abdul Qadeer. 22 Kashmiris were killed in an attempt to deliver Adhan.
- 1932 – Communal Award made by British Prime Minister Ramsay Macdonald on 16th August. This award granted the right of separate electorates to minorities of India.
- 1932- Third Round Table Conference held in London from Nov 17, 1932, to Dec 24, 1932.
- 1933 – Pakistan National Movement was founded by Chaudhary Rehmat Alli after the declaration of the name 'Pakistan' in his pamphlet "Now or Never".
- 1934 - Muhammad Ali Jinnah elected as the permanent president of the All-India Muslim League.
- 1935 – The government of India Act was enforced. It got royal assent on July 24. This was the lengthiest act, having 321 sections and 10 schedules.
- 1936 - Sindh was separated from Bombay Presidency on the 1st of April, 1936. This was done under Section 40(3) of Government of India Act, 1935.
- 1937 - Provincial Elections held in India under the Act of 1935. Indian National Congress won the majority by taking 707 seats out of 1585.
- 1937–39 - Congress ruled in 7 out of 11 provinces in India.
- 1937 - Strong anti-congress governments in Punjab and Bengal.
- 1937 – Jinnah-Sikandar Pact was signed. It was a big step towards the unity of Muslims.
- 1937 - Sardar Abdur Rab Nishtar founded the All-India Muslim Students Federation (MSF).
- 1938 – Molvi A.K Fazl-ul-Haq of Bengal joined All India Muslim League.
- 1938 – Raja Syed Muhammad Mehdi of Pirpur presented a report on cruelties of Congress Government in 7 provinces. This report was given the name Pirpur Report.
- 1939 – Sharif Report was presented by Mr. Sharif. It collected the facts and injustices of the government with Muslims of Bihar.
- 1939 – A.K Fazl-ul-Haq published a pamphlet with the title of "Muslim sufferings under the rule of Congress".
- 1939 – On Dec 22, Muslims observed 'Day of Deliverance' on the resignation of Congress from ministries.
- 1939-45 – World War II was fought between the Axis Powers (Germany, Japan, and Italy) and the Allies (France, US, Britain, the Soviet Union, and to a lesser extent China).
- 1940 – Khaksar Tragedy occurred in which 50 Khaksars were killed by the Police near Bhati Gate, Lahore.
- 1940 – Pakistan Resolution was passed on 23rd March. It was written and prepared by Muhammad Zafarullah Khan and presented by A.K Fazl-ul-Haq. The resolution was seconded by Chaudhary Khaliquzzaman from United Provinces, Sir Abdullah Haroon from Sindh, Maulana Zafar Ali Khan from Punjab, Qazi Muhammad Essa from Baluchistan, and Sardar Aurangzeb Khan from NWFP.
- 1942 – Quit India Movement was launched by Gandhi during the session of Congress in Bombay.
- 1942 – Cripps Mission was sent by the British Government to get the cooperation of Indian people for WW-II. Sir Stafford Cripps led this mission.
- 1944 - Gandhi-Jinnah talks in Bombay. These talks were on the desire of Gandhi as he wrote a letter to M.A Jinnah.
- 1944 - The C. R. formula was a proposal by Chakravarti Rajagopalachari to solve the political deadlock between the Congress and the Muslim League on the topic of the independence of British India. It was discussed in the Gandhi Jinnah talks of 1944.
- 1945 – Lord Wavell discussed his suggestion with the British Government in London and formed a plan. This plan was made public on June 14.
- 1945 – Viceroy Lord Wavell called a meeting of the political leadership of India. This meeting was given the name of the Simla Conference.
- 1946 – The Cabinet Mission Plan arrived in India for farming a new constitution after meeting with Indian leaders. It had three members of the British Cabinet. Pethick Lawrence, Sir Stafford Cripps, A.V Alexander. It was the last attempt for United India.
- 1946 – Direct Action Day was observed on the call of the Muslim League in Kolkata. Riots broke out between Muslims and Hindus after this day.
- 1946 – Provincial Elections held in British India. All India Muslim League won 429 seats of Muslims out of 494.
- 1946 – Quit Kashmir Campaign announced by Sheikh Abdullah.
- 1946 - Direct Action Day was held on the 16th of August, 1946. It was a day of nationwide protest by the Muslim community of India, announced by Muhammad Ali Jinnah.
- 1947 – 3rd June Plan or Partition Plan was announced. Britain decided to divide India into two separate states.
- 1947 - The first Constituent Assembly of Pakistan came to be, in July, with a total of 69 Members including one female Member.
- 1947 - On July 25th, Mountbatten addressed a special meeting of the Chamber of Princes in which he urged the Princes to use the Instrument of Accession and accede to either Pakistan or India. Maharaja Hari Singh, the ruler of Jammu & Kashmir, joined India through this instrument.
- 1947 – Pakistan came into being on August 14.
- 1947- **562** princely states existed in India

## Noteworthy Ancient Dynasties of the Subcontinent

**The Slave Dynasty** (1206-1290) was a dynasty of Sultans in Delhi. The dynasty was founded by Qutb Uddin Aibak. Aibak was a former slave of the sultan Muhammad of Ghur. When Muhammad was assassinated in 1206, Aibak took control and established power in Lahore. Aibak eventually died in a polo accident in 1210, and the crown was passed onto his son-in-law, Iltutmish. The dynasty lasted till 1290

**The Khilji Dynasty** (1290-1320) was a dynasty of rulers, from Turko-Afghan backgrounds, which ruled the Delhi sultanate and covered large parts of the Indian subcontinent from 1290 till 1320. It was founded by Jalal ad Din Firuz Khilji.

**The Tughlaq dynasty** (1320-1413) was a dynasty of Muslim rulers in India. They ruled over the Delhi sultanate. Their rule started in the year 1320 under Ghazi Malik, who assumed the title of Ghiyas-al-Din Tughluq, in Delhi. His eldest son, Muhammad Bin Tughlaq, became the Sultan of Delhi in 1325, and was known as the 'Mad King'. The dynasty eventually came to an end in 1413.

## The Mughal Empire (1526-1857):

| | |
|---|---|
| **Babur: (1526–1530)** | 1. Babur was the founder of the Mughal dynasty in India.<br>2. By defeating Ibrahim Lodhi in the first battle of Panipat in 1526 he laid the foundation of the Mughal dynasty.<br>2. Babur defeated Rana Sanga of Mewar in the Battle of Khanwa in 1527.<br>3. His real name was Ẓahir-ud-Din Muḥammad.<br>4. Babur wrote his memoirs Baburnama (Tuzuk-i-Baburi) in the Turkish language.<br>5. Gunpowder was introduced in India. |
| **Humayun: (1530–1540) (1555-1556)** | 1.Humayun was the eldest son of Emperor Babur.<br>2. He became the second ruler of the Mughal empire after succeeding his father in 1530.<br>3. He was crowned in 1530 he ruled for 10 years but in 1540 he was defeated by Sher Shah Suri in the battle of Kannauj and was forced to leave India.<br>4. 15 years later in 1555 Humayun regained the throne by defeating Sikander Suri (successor of Sher Shah Suri).<br>5.His real name was Nasir-ud-Din Muhammad.<br>6. Gulbadan Begum wrote his biography Humayun-Nama.<br>7. Humayun was killed in an accidental fall from his library staircase in 1556. |
| **Akbar: (1556–1605)** | 1.Akbar was the third ruler of the Mughal Dynasty.<br>2. He was crowned when he was just 14 years old.<br>3. In the second battle of Panipat in 1556, Bairam Khan represented Akbar and defeated Hemu Vikramaditya.<br>4. Akbar built Buland Darwaza at Fatehpur Sikri to commemorate his victory over Gujarat.<br>5. Akbar's forces headed by Raja Man Singh and Asaf Khan defeated Rana Pratap in the battle of Haldighati in 1576.<br>6.His real name was Jalal-ud-Din Muhammad.<br>7. He built Ibadat Khana (House of Worship) at Fatehpur Sikri.<br>8. In 1581, Akbar promulgated the Din-e-Ilahi or Tauheed-e-Ilahi to establish a national religion.<br>9. He ruled for nearly 50 years and died in 1605 and was buried outside of Agra at Sikandra.<br>10. Abul Fazal wrote Akbar Nama, a biographical account of Akbar.<br>11. Khanzada Mirza Khan Abdul Rahim Khan-e-Khana (aka Rahim) was the most famous court poet during Akbar's reign. |
| **Jahangir: (1605–1627)** | 1.His real name was Nur-ud-din Mohammad Salim.<br>2. Jahangir was the fourth Emperor of the Mughal dynasty who ruled from 1605 until he died in 1627.<br>3. In 1611, Jahangir married Mehr-un-Nisa, the young widow of a Mughal officer, Sher Afgan.<br>4.She soon became Jahangir's favorite queen and assumed the title of Nur Jahan (Light of the World).<br>5. His greatest failure was the loss of Kandahar to Persia in Mughal-Safavid war, 1622. |
| **Shahryar Mirza (Nov 1627-January 1628)** | He was the youngest son of Jahangir and was made emperor with the support of her step-mother who was also mother in law, Nur Jahan. He suffered defeat and was killed by the orders of his victorious brother Shahjahan in January 1628. |
| **Shahjahan: (1628–1658)** | 1.He was the fifth Emperor of the Mughal dynasty.<br>2. He was the son of Emperor Jahangir and his Hindu Rajput wife, Taj Bibi Bilqis Makani.<br>3. He built Tajmahal (to act as the tomb of Mumtaz Mahal) and Moti Masjid at Agra, and Jamia Masjid and Red Fort (Diwan-i-Aam and Diwan-i-Khas) at Delhi.<br>4.His real name was Shahab-ud-Din Muhammad Khurram.<br>5. As he lay dying in 1658 there was a brutal war of succession among his four sons (Dara, Aurangzeb, Shuja, and Murad) but Aurangzeb came out victorious.<br>6. Aurangzeb put him under house arrest in Agra Fort for 8 years where he died at the age of 74.<br>7. The Peacock Throne was made for Shahjahan.<br>8. Prince Dara Shikoh was his son. |
| **Aurangzeb: (1658–1707)** | 1. His full name was Muhi-ud-Din Mohammad Aurangzeb.<br>2. He was the sixth Emperor of the Mughal dynasty.<br>3. He was the third son and sixth child of Shah Jahan and Mumtaz Mahal. |

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| | 4. He died in Ahmednagar in 1707 at the age of 88.<br>5. He was also known as Alamgir (Conqueror of the World). |
| **Bahadur Shah I (1707-1712)** | 1.His real name was Qutab-ud-Din Muhammad Muazzam Shah Alam.<br>2.He remained for 5 years.<br>3.He tried to make settlements with opponents of the empire.<br>4. He was the seventh ruler of the Mughal dynasty. |
| **Jahandar Shah (1712-1713)** | 1.His real name was Maaz-ud-Din Jahandar Shah Bahadur.<br>2.He ruled only for one year as he was attacked and defeated by his nephew Farrukhsiyar. |
| **Farrukhsiyar (1713-1719)** | 1.He allowed East India Company to import custom free goods into Bengal.<br>2.He was supported by Sayyid Brothers (Syed Hassan Ali Khan Barha & Syed Hussnain Ali Khan Barha)<br>3. After 6 years of rule, he was betrayed by Sayyid Brothers.<br>4. Syyed Brothers imprisoned him and made his cousin Rafi ud Darajat the King. |
| **Rafi-ud-Darajat (1719-1719)** | 1.He was projected to the throne by Sayyid Brothers.<br>2. He sat on the throne for only 4 months before his death. |
| **Shah Jahan II (1719-1719)** | 1.His real name was Rafi-ud-Daulah.<br>2.After becoming king he remained alive for only less than 4 months. |
| **Muhammad Shah Rangila (1719-1748)** | 1.His real name was Roshan Akhtar Bahadur.<br>2.He got rid of Sayyid Brothers.<br>3. He was attacked by Nadir Shah of Persia.<br>4.Nadir Shah took the famous Peacock Throne with him<br>5.Major states like Hyderabad and Bengal established their Kingdoms. |
| **Ahmed Shah Bahadur (1748-1754)** | 1.He was the thirteenth king of the Mughal dynasty.<br>2.He was defeated by Marhatas at the Battle of Sikandarabad in 1954. |
| **Alamgir II (1754-1759)** | 1.His real name was Aziz-ud-Din<br>2.He remained king of India for 5 years. |
| **Shah Jahan III (1759-1760)** | 1.His real name was Muhi-ul-Millat.<br>2.He remained a ruler for only 1 year. |
| **Shah Alam II (1760-1788) (1788-1806)** | 1.His real name was Ali Gauhar.<br>2.He was the sixteenth ruler of India.<br>3. He was blinded by his enemy in August 1788 and lost his throne,<br>4. He regained his empire in October 1788 when Mahadaji Shinde killed his enemy Abdul Qadir and sent his eyes and ears to Shah Alam.<br>5.Tipu Sultan was martyred during his range in 1799. |
| **Muhammad Shah Bahadur (August 1788-October 1788)** | 1.His real name was Bidar Bakht.<br>2.He remained King only for 2 months.<br>3.He was made king during the temporary overthrow of Shah Alam II. |
| **Akbar Shah II (1806-1837)** | 1.His real name was Mirza Akbar.<br>2. He was 2nd last Mughal Emperor<br>3.He was a puppet of British. |
| **Bahadur Shah (1837-1857)** | His real name was Abu Zafar Siraj-ud-din Muhammad Bahadur Shah Zafar.<br>The War of Independence of 1857 was fought and it was the end of the Mughal Empire in India.<br>He was the Nineteenth and last emperor of the Mughal dynasty.<br>He was a poet.<br>He was buried in Burma. |

## Islamic Reformers and their Eminent Work in Indo-Pak History (1564-1898):

### Hazrat Mujadid Alf Sani (1564-1624):

- His real name was Sheikh Ahmed Sirhindi. He was born in East Punjab on 26 June 1564. He was a disciple of Khwaja Baqi Billa.
- He strongly opposed the Din-i-Ilahi proposed by Emperor Akbar.
- He wrote letters to nobles of Royal courts. These letters are known as Muktunat-i-Islam Rabani.
- Sheikh Ahmed was imprisoned in the fort of Gwalior by Mughal Emperor Jahangir because Sheikh Ahmed forbade to perform sajda to Jahangir however he was released after two years.
- Later Sheikh Ahmed became a guide to Jahangir on religious matters and Jahangir built a mosque on his advice.

### Shah Wali Ullah (1703-1762):

- He was born on 21 February 1703 in Delhi. He is also entitled to Imam ul Hind.
- His father's name was Abd-ur-Rahim who established Maderessah e Rahimya.
- He translated the Holy Quran in the Persian language.
- To counter sectarianism he introduced the concepts of Izalat-al-Khafa and Khilafat-ul-Khulfa. He also wrote a book Qurat-ul-Ain in this context.
- In his book Hujjat-Ullah-il-Bilagah he identified reasons for the socio-eco deterioration of Muslims.
- Shah Walli Ullah called upon Ahmad Shah Abdali. Ahmad Shah Abdali responded to his call and defeated Marathas in 1761.
- He introduced the concept of Fak-ul-Nizam which aimed at the Islamic Revolution.

- His notable books include Tafhim and Sarat-i-Mustaqeem.

### Syed Ahmed Shaheed (1786-1831):

- He was born on 29 November 1786 in Rai Barelvi.
- He is well known for his struggle against Sikhs in Punjab and NWFP.
- He is the forerunner of the Mujahideen Movement aimed at the religious and political revival of Muslims.
- Owing to his struggles he became the founder of Tariqah-e-Muhammadiyah (The Way of Prophet Muhammad (PBUH) )
- He is credited for making efforts to collect Usher (Islamic agricultural tax).
- He launched his Jihad against Sikhs from NWFP.
- The first battle between Sikhs and forces of Syed Ahmed was fought near Akora on 21 December 1826 in which Muslims defeated the Sikhs. Sikh forces were led by Budh Singh.
- Peshawar was captured in 1830.
- Syed Ahmed was martyred in Balakot (1831) when forces led by Sikh commander Sher Singh occupied a strategic position at hilltop known as Mitti Kot to attack Syed Ahmed in the valley of Balakot.

### Haji Shariat Ullah (1781-1840):

- He is well known for his Faraizi movement initiated from Bengal.
- It was aimed at a religious revival. The Faraizi movement tried to uplift the most depressed class of Muslims by asking them to abandon un-Islamic practices and emphasis was laid on performing obligatory religious duties.
- He encouraged Muslims to denounce some traditional practices that were known as Riwaj. Such as praying at shrines of Saints and adoption of certain Hindu traditions.
- Moshin al-Din Ahmed (Dudu Miyan) was the only son of Haji Shariat Ullah.
- Dudu Miyan organized the Faraizi movement in a way that he divided Bengal into units and appointed a Khalifa for each unit who would inform him about the particular units.
- Dudu Miyan strongly rejected the ban on cow slaughter and taxes imposed on poor Muslim farmers by their landlords.

### Sir Syed Ahmed Khan (1817-1898):

- He is known as the Father of the Two-Nation Theory. It was after the Hindi-Urdu controversy in United Provinces when Sir Syed realized that the gulf of differences between Hindus ad Muslims cant be bridged.
- He is well known for laying stress on western education for Muslims and opposition towards Muslims taking part in politics as it would have agitated the British.
- Sir Syed Ahmed Khan was the forerunner of the Aligarh Movement, an educational movement. Due to the prominent leaders that the Aligarh Institute contributed to the Muslim League and the independence struggle, it is known as the "Ammunition of Muslim League."
- His famous writings include:
  'Asbab-e-Baghawat-e-Hind' (Causes of Indian Revolt) in which he explained that instead of laying the blame on the Muslims for the War of Independence of 1857 (which was the common notion at the time), it was the suppressive policies of the British and their total ignorance regarding the local culture which are to be blamed. Another important work was 'Loyal Muhammadans of India' in which he explained loyal services rendered by Muslims in India. Tehzib ul Ikhlaq is another famous work of Sir Syed, aimed at the social uplifting of Muslims. He wrote Tabeen-ul-Kalam and Risala-e-Ahkam to reduce discrepancies between Muslims and Christians.
- He established Muhammadan Anglo-Oriental College of Aligarh in June 1875 and it was raised to the status of University in 1920.
- Lord Lytton inaugurated Aligarh college in 1875. It was an attempt by Sir Syed to engage the British in his educational reforms for Muslims.
- Sir Syed established a Scientific society in 1864.
- Sir Syed established the Muhammadan Educational Conference in 1886 aimed at enhancing the scope of the Aligarh Movement.
- Sir Syed played an eminent role in preventing Britishers from replacing Urdu with Hindi as an official court language in UP in 1867.

### Related Information from exam perspective:

- **Darul Uloom Deoband** was established on 31 May 1866 in Chatta Mosque.
- Maulana Qasim Nanotvi is the founder of this movement.
- Under this movement the Ulemas of Dar ul Uloom established Dar ul Ifta, they acted as a center for social, economic, religious guidance for Muslims.

## List of British Viceroys during British India (1857-1947)

- Lord Canning (1857-1862) (During his tenure Government of India Act 1858 passed. It was in his tenure that the Indian Council Act 1861 was passed which introduced portfolio system in India and withdrawal of Dyarchy System)
- Lord Elgin I (1862-1863) (He died of a heart attack one year later he became Viceroy in Dharamsala)
- Lord William Denison (1863-1864). He also served as Governor of madras.
- Lord John Lawrence (1864 -69) (During his tenure telegraphic lines were opened between Europe and India, Great Famine of Odisha also occurred in his tenure).
- Lord Mayo (1869-72) (He opened Mayo College in Ajmer. India's census begun in his tenure)
- Lord Northbrook (1872-1876) (Famine in Bihar and Kuka Movement in Punjab)
- Lord Lytton I (1876-80) (His time has been described as "Seeding period of Indian Nationalism")
- Lord Ripon (1880-84) It was during his tenure that the Hunter Commission came in 1882 for educational reforms and the First Factory Act was enacted in 1881.

- Lord Dufferin (1884-88) - Allan Octavian Hume laid the foundation of the All India National Congress.
- Lord Lansdowne (1888-94) - Durand Line was demarcated during his tenure.
- Lord Elgin II (1894-1899) - It was in his tenure that the boundaries of China and Siam were demarcated, Anglo-Russian convention was signed (1895) and Diamond Jubilee of Queen Victoria was celebrated.
- Lord Curzon (1899-1905)
- Lord Minto II (1905-10) - Major events during his tenure were, Deportation of Lala Lajpat Rai, Surat Split, Trial of Bal Gangadhar Tilak.
- Lord Hardinge II (1910-16) (Major events during his tenure were, a reversal of Partition of Bengal, shifting of capital from Calcutta to Delhi, Formation of Banaras Hindu University)
- Lord Chelmsford (1916 -21) - Important events during his reign were the Montague-Chelmsford Reforms, Khilafat Movement, Lucknow Pact, Jallianwalah Bagh Tragedy, Non-Cooperation Movement, August Declaration (1917) took place.
- Lord Reading (1921-26) - He served as Chief Justice of England. It was his time that the Foundation of Communist Party of India laid its foundation.
- Lord Irwin (1926-31) (Irwin Pact (5 March 1931) was an outcome of talks between Lord Irwin and Gandhi before the Second Round Table Conference.
- Lord Willingdon (1931-36) It was during his period when the second and third round table conference took place, Burma was separated from India, Poona Pact (1932).
- Lord Linlithgow (1936-43) (He served as the longest viceroy of India).
- Lord Wavell (1943-47) - The most important events during his tenure were the Great Famine of Bengal (1943), Rajagopalachari Formula (1944), Simla conference (1945); Conclusion of Wavell Plan (1945)
- Lord Mountbatten (1947) (First Governor-General of the Dominion of India)

## Noteworthy Events / Movements predating the Partition

**The Black Hole of Calcutta** - June 20, 1756
It was a dungeon in Fort William, Calcutta. In it, the troops of the Nawab of Bengal, Siraj ud-Daulah, held British prisoners of war on the 20th of June, 1756. One of the prisoners, John Zephaniah Holwell, stated that after the fall of Fort William, the surviving British soldiers, Indian sepoys, and Indian civilians were imprisoned overnight in horrible conditions. They were so cramped that many died from suffocation and heat exhaustion. Around 123 of 146 prisoners of war imprisoned died there. Some modern historians believe that there were a total of 64 prisoners and that 43 of them died.

**Doctrine of Lapse – 1848**
The Doctrine of lapse was a formula created by Lord Dalhousie, the then governor-general of India, to address the questions of succession to Hindu Indian states. It was a corollary to the doctrine of paramountcy, by which Great Britain claimed the superintendence of the subordinate Indian states and so also the regulation of their succession.

**Anjuman-i-Himayat-i-Islam** - 1884
It is an Islamic welfare organization. It was founded in 1884 in Lahore by Khalifa Hameed-ud-Din, who also became its first president. A scheme known as "Muthi Bhar Atta Scheme" was introduced for raising funds for and by the Anjuman.

**Nadwatul-Ulema – 1893**
It was formed in 1893 by scholars such as Lutfullah Aligarhi, Shah Muhammad Hussain Allahabadi, Ashraf Ali Thanwi etc. Syed Muhammad Ali became the first Nazim of the organization. Its purpose was to bring harmony and co-operation among various groups within the Muslim Millat, and to bring about moral, religious and educational reform and progress. The organization held its first convention in 1894 in Madarsa Faiz-e-Aam.

**Simla Deputation – October 1, 1906**
The meeting of the Indian Muslim leaders with the Governor General and Viceory Lord Minto to discuss the problems of differences of Hindus and Muslims at constitutional level. Muslims sought permission for their representation in the government and demands were put forward for a separate electorate.

**Swadeshi Movement - *1906***
The Swadeshi Movement was part of the Indian independence movement, but it gained momentum after the Partition of Bengal and proved to be a very successful movement against British Raj. Mahatma Gandhi started this movement and considered it paramount to swaraj which is self-rule. This movement was also regarded as the Vande Mataram in Andhra Pradesh. The government's reasons for partitioning Bengal were that it had a huge population but in reality, they could not contain the revolt that was picking up pace in Bengal and had to suppress and control it somehow. They gave the western part of Bengal to Hindus and eastern part to Muslims but this strategy to divide and rule backfired and resulted in the Swadeshi Movement. Indians also boycott English goods as part of this movement.

**Minto-Morley Reforms (aka Indian Councils Act) - 1909**
The reforms were carried out by liberal philosopher John Morley, the then Secretary of State for India, and Lord Minto, the Viceroy off India. For the first time, the demand for a separate electorate was accepted. It formally/officially granted Separate Electorate to the Muslims, which was a great achievement for them. Due to this, the Muslims could now have their own representative members at the Legislative Councils, to be elected by Muslims alone.

**The Delhi Conspiracy case – 1912**
It was an attempt in 1912 to assassinate the then Viceroy of India, Lord Hardinge, on the occasion of transferring the capital of British India from Calcutta to New Delhi. The attempted assassination took place on 23 December 1912, when a homemade bomb was thrown into the Viceroy's howdah as the ceremonial procession was moving through Delhi. The Viceroy escaped with flesh wounds.

**Silk Letter Movement (Reshmi Rumal Tehreek) – *1913 to 1920***

The movement was started by Mehmood ul Hassan also known as Sheikh ul Hind who was an ulema from the Darul Uloom Deoband who started sending letters to other Deoband leaders around the world. It was a freedom movement – freedom from British colonialism – by the Deobandi leaders who united and formed an alliance. These leaders were spread out; from Turkey to Germany to Afghanistan to Iran, they were all exchanging letters, and these letters were written on silk cloth which is where the movement got its name.

**Hindu Mahasabha - 1915**

The Hindu Mahasabha is a political party in India. The organization was formed by Madan Mohan Malviya in 1915, the purpose of which is the protection of the rights of the Hindu community, after the formation of the All-India Muslim League in 1906 and the British India government's creation of separate Muslim electorate under the Morley-Minto reforms of 1909.

**The Montagu-Chelmsford Reforms - 1918**

These were reforms introduced in British India with the purpose of gradually introducing self-governing institutions. The reforms were outlined in the Montagu-Chelmsford Report prepared in 1918 and formed the basis of the Government of India Act 1919. They were brought into action in 1921. The main features of these reforms were as follows:

- The Imperial Legislative Council was now to consist of two houses- the Central Legislative Assembly and the Council of State.
- The provinces were to follow the Dual Government System or Dyarchy.

**Rowlatt Act & Satyagraha - 1919**

The controversial Rowlatt Act was passed by the British government in February 1919. The act effectively gave powers to the police to arrest any person without any reason. The aim was to curb the growing nationalist sentiment in the country. As a reaction to this unjust act, Gandhi called upon the people to do 'Satyagraha'.

## Satyagraha (Concept & Jinnah's Opinion)

This concept was introduced into Congress by Mahatma Gandhi and the followers of this theory/ideology are called Satyagrahis. This theory influenced the likes of Nelson Mandela and Martin Luther King in their struggle against social injustice and during the Civil Rights Movements.

Mohammad Ali Jinnah resigned from Congress in 1920 because it had started following the ideology of "Satyagraha" which is basically the resistance by civilians but is non-violent. However, Jinnah deemed it to be something that would create political anarchy and he wasn't in favour of it.

**Khilafat Movement – 1919 to 1924**

The pan-Islamist political protest started by Muslims residing in British India to restore the caliphate in the former Ottomon Empire. They were considered the leaders of the Sunni Muslims. The leaders of this movement were Maulana Mohammad Ali Jauhar, Shaukat Ali, Abul Kalam Azad, and Hakim Ajmal Khan.

**The Noncooperation Movement – 1920-1922**

It was a movement organized by Mahatma Gandhi during 1920-1922. The purpose of the movement was to induce the British to grant self-governance (swaraj) to India. It was one of Gandhi's first organized acts of large-scale civil disobedience (Satyagraha). The movement came about as a result of the Amritsar massacre of April 1919, when British troops killed several hundred Indians. The situation was further worsened when the British failed to take any adequate action against Gen. Reginald Edward Harry Dyer, who had commanded the troops involved in the massacre. Gandhi strengthened the movement by supporting (on nonviolent terms) the contemporaneous Muslim campaign against the dismemberment of the Ottoman Empire after WWI. The movement was called off by Gandhi after the Chauri Chaura incident in February of 1922, when an angry mob murdered police officers in the village of Chauri Chaura.

**Delhi Proposal - 1927**

The Delhi Proposal was an agreement between the Muslim League and Congress. The two parties could not reach a proper common ground with regards to the subject of separate electorate. Due to this, after hefty discussions, it was unanimously concluded that the League accept a settlement with Congress based on certain proposals. This concluded agreement came to be known as Delhi Proposals. The League declared that provided the following demands are accepted, they would withdraw their demand for separate electorates:

- Sindh should be separated from Bombay and should be constituted into an independent province.
- Reforms should be introduced in the North-West Frontier Province and Baluchistan on the same footing as in any other province of India.
- Reservation of seats according to the population for different communities in the Punjab and Bengal.
- Muslims should be given 1/3rd representation in the Central Legislature.

**Nehru Report – August 10, 1928**

Prepared by a committee appointed by Motilal Nehru and Jawaharlal Nehru of the All Parties Conference, it proposed a joint electorate but with reservation of seats for minorities in the parliament. Moreover, it demanded a dominion status for India.

**Fourteen Points of Jinnah – 1928**

Mohammad Ali Jinnah consolidated the Muslim verdict in the form of fourteen items which later came to be known as his fourteen points.

**Majlis-e-Ahrar-ul-Islam - 1929**

It was an Indian nationalist Muslim political party, with an anti-imperialist and anti-feudal outlook. It strove for Indian independence from British rule. The party eventually faded, but left an impact on major cities of Punjab like Amritsar, Lahore, Sialkot, Multan, Ludhiana and Gurdaspur.

**Allahabad Address – December 29, 1930**

In his Allahabad Address, Allama Muhammad Iqbal gave the idea of a separate Muslim state for the Muslims of India. He made it clear that Muslims could not co-exist with Hindus in a place where they weren't recognized as equals. The Two-Nation Theory originated from this address of Allama Iqbal. It was

delivered at the 25th session of the All India Muslim League on 29th December 1930.

**Round Table Conferences – 1930 to 1932**

Peace conferences with a focus on constitutional matters of India, organized by Indian political leaders and the British government.

**Agenda:** The purpose of these conferences was to establish peace in India. After Simon Commission and the contents, it contained regarding separate electorate and separation of Hindus and Muslims, the British started working towards some constitutional reforms but could not succeed since the Hindus were striving for Swaraj (self-rule) and Muslims wanted a separate homeland as well. Gandhi had started his civil disobedience movement and most Hindus and people from Congress were jailed. It was also discussed that India be turned into a dominion, but those efforts were in vain as well.

**Key Participants:** Bahadur Sapru, B. R. Ambedkar, K. T. Paul, Mohammad Ali Jinnah, Sir Tej, Sir Muhammad Zafrulla Khan, V. S. Srinivasa Sastri, Mirabehn, and Ramsay MacDonald (PM of Britain).

**Quick fact:** The only muslim women who attended the round table conference was Begum Jahaanara Shahnawaz

## 1st Round Table Conference

*November 1930 to January 1931*

The conference ended in the British agreeing to provide safeguards to minorities and also consider making India a federal state.

## 2nd Round Table Conference

*September 1931 to December 1931*

The second conference more or less worked on the issues brought up in the first one, but Gandhi opposed treating The Untouchables or Muslims as a minority, but this claim was rejected. Jinnah did not participate in this conference due to the politics of India. Moreover, after the conference ended, Gandhi went back to India to reinitiate his Civil Disobedience Movement and as a result was arrested.

## 3rd Round Table Conference

*November 1932 to December 1932*

This conference was only attended by 46 individuals. Congress and the Labor Party were absent. It was a short conference and it ended in the proposal of these conferences becoming part of the Government of India Act 1935.

**Khaksar Movement - 1931**

Date of inception: 1931

Place of inception: Lahore

Founder: Allama Inayat-Ullah Mashraqi

The aim of this movement was to free India from the British rule and put in place a Hindu-Muslim government.

**Women voting in Subcontinent - 1935**

A report was prepared from the three Round Table Conferences, with very limited input from women. The report was sent to the Joint Committee of the British Parliament recommending lowering the voting age to 21, but retaining property and literacy restrictions, as well as basing women's eligibility on their marital status. It also provided special quotas for women and ethnic groups in provincial legislatures. These provisions were incorporated into the Government of India Act 1935. Though it extended electoral eligibility, the Act still allowed only 2.5% of the women in India to vote.

**The August Offer - 1940**

In this offer, Viceroy Linlithgow promised the expansion of the Executive Council of the Viceroy of India to include more Indians, the establishment of an advisory war council, giving full weight to minority opinion, and the recognition of Indians' right to frame their own constitution. In return, it was hoped that all parties and communities in India would cooperate in Britain's efforts in World War II. It was rejected by the Congress as it basically assured that no constitutional scheme was acceptable to the government without the agreement of minorities such as the Muslim League. The Muslim League accepted the offer.

**Cabinet Mission - 1946**

The Cabinet Mission arrived in India to discuss the transfer of power from the British to the local Indian leadership with the different parties that existed in India at the time. The parties (Congress and Muslim League) were given a chance to come towards mutual agreement on their demands (this included the Second Simla Conference from 5-12 May). However, when an agreement could not be reached by the parties, the Mission forwarded their own proposals in the form of a Statement on the 16th of May, 1946.

## The 3rd June 1947 Plan (aka the Indian Independence Act)

It included the following principles:

- British India was to be partitioned into two dominions – India and Pakistan.
- The constitution framed by the Constituent Assembly would not be applicable to the Muslim-majority areas (which were to become Pakistan). The question of a separate constituent assembly for the Muslim-majority areas would be decided by these provinces.
- The legislative assemblies of Bengal and Punjab met and voted for the partition. It was decided to partition these two provinces along religious lines.
- The legislative assembly of Sindh would decide whether to join the Indian constituent assembly or not. It decided to go to Pakistan.
- A referendum was to be held on NWFP (North-Western Frontier Province) to decide which dominion to join. NWFP decided to join Pakistan.
- The date for the transfer of power was August 15, 1947.
- The Boundary Commission was established, under the leadership/chairmanship of Sir Cyril Radcliffe. It was appointed by Lord Mountbatten, the final viceroy of British India, and consisted of four members from the Indian National Congress and four from the Muslim League. Its purpose was to fix the international boundaries between the two countries, and to demarcate Bengal and Punjab into the two countries.
- The princely states were given the choice to either remain independent or accede to India or Pakistan. The British suzerainty over these kingdoms was ended.

- The title 'Emperor of India', was no longer to be used by the British Monarch.
- The British Parliament could not enact any law in the territories of the new dominions after their creation.
- The Governor-General was made a constitutional head, and until a new constitution came into existence, the Governor-General would assent any law passed by the constituent assemblies of the two dominions in His Majesty's name.

## POST-PARTITION TIMELINE

**August 1947** – Leader of All India Muslim League Quaid-e-Azam Mohammad Ali Jinnah, sworn in as the first governor-general of Pakistan on the 15th of August, after British India is divided into two independent states. Mian Abdul Rashid (later the first Chief Justice of Pakistan), as the most senior Muslim judge in British India, administered the oath of office to him. Liaquat Ali Khan became the first Prime Minister of Pakistan.

**August 1947** – On August 22, 1947 Governor of NWFP, George Cunningham under the directions of the Government of Pakistan, dismissed the NWFP Congress Ministry. A Muslim League ministry headed by Abdul Qayyum Khan was appointed on 23 August.

**October 1947** - On the 5th of October 1947, the Nawab of Bahawalpur signed an agreement with Pakistan based on which Bahawalpur State acceded to Pakistan. The accession was accepted on 9 October, making Bahawalpur the first state to accede to Pakistan.

**October 1947** - The Government of Azad Jammu and Kashmir was established on 24th October, 1947. It came about as a result of a rebellion against India by the Muslims of Azad Jammu and Kashmir.

**December 1947** - The Pakistan Red Crescent was founded in Pakistan on December 20, 1947 by an Order called "The Pakistan Red Cross Order" issued by Quaid-e-Azam.

**April 1948** - On April 1, 1948, East Punjab in India discontinued the flow of cannel waters to West Punjab, threating the loss of crops.

**May 1948** - The Inter-Dominion Accord was signed on May 4, 1948, which required India to provide water to Pakistan in return for annual payments.

**September 1948** - Operation Polo was carried out by India in September 1948, against the State of Hyderabad. It was a military operation in which the Indian Armed Forces invaded the Nizam-ruled princely state, annexing it into the Indian Union. The State was ruled by the Nizam, Mir Sir Osman Ali Khan, Asaf Jah VII, at the time.

***Objective's Resolution – March 12, 1949***

The resolution signified that the Constitution of Pakistan in the future will not be modeled on European patterns as had happened in the past. It will be based on the democratic faith and ideology of Islam.

**1949** - The first constituent assembly passed the Public and Representative Office (Disqualification) Act (PRODA), in 1949. The act provided for trial of public office holders and disqualification from holding public office for up to 15 years.

**July 1949** - 'The Karachi Agreement' was signed on 27 July 1949. The agreement was formally named the 'Agreement between Military Representatives of India and Pakistan Regarding the Establishment of a Cease-Fire Line in the State of Jammu and Kashmir'. It was formulated under the supervision of the Truce Subcommittee of the UNCIP.

**April, 1950** – The Liaquat-Nehru Pact was signed on the 8th of April because of increasing hostilities between Pakistan and India right after independence. The pact's aim was to promote peace and take care of the rights of minorities in both countries. This pact did help in reducing tensions in both countries but it didn't last long due to the Kashmir issue that ensued shortly after.

**1950** - Pakistan became the third non-communist country, and the first Muslim country to formally recognize the People's Republic of China.

**October 1951** - Liaquat Ali Khan, who drafted the Objectives Resolution assassinated in Rawalpindi.

**1951-1954** - Several prime ministers sacked over drafting the constitution and defining the role of various institutions for governance.

**October 1953** - The Bogra Formula was proposed by Prime Minister Muhammad Ali Bogra on 7 October 1953 before the Constituent Assembly of Pakistan. The Bogra Formula's purpose was to permanently abolish the post of Governor-General and to replace it with an elected figurehead presidency.

**October 1954** - The first Constituent Assembly of Pakistan was dissolved on October 24, 1954, by Governor General Malik Ghulam Muhammad.

**May 1954** - In May 1954, Pakistan signed the Mutual Defense Assistance Agreement with the United States. In the same year it also became a member of SEATO along with the United States, Britain, France, Thailand, the Philippines, Australia and New Zealand.

**November 1954** - The One Unit Scheme was initiated by the then-Prime Minister Muhammad Ali Bogra on 22 November 1954. The scheme merged the four provinces of West Pakistan into a single province. The Prime Minister Chaudhry Muhammad Ali implemented the framework of the One Unit program on 14 October 1955 after Pakistan National Assembly passed a bill merging all of West Pakistan into a single province on 30

September 1955. The province of West Pakistan (and the One Unit scheme) was dissolved on 1 July 1970 by President General Yahya Khan.

**February 1955** - On 1 February 1955, PIA flew its first international service, between Karachi and London via Cairo.

**February 1956** - The Constituent Assembly adopted the 1956 Constitution on 29 February 1956.

**March 1956** - Military strongman, Iskander Mirza, is sworn in as the first president and approves Pakistan's first constitution.

**September 1958** - Pakistan purchased Gwadar from Oman for a total sum of US$3 million on 8th of September, 1958, after about four years of negotiations. Gwadar officially became part of Pakistan on 8th of December 1958.

**October 1958** - Iskander Mirza declared martial law.
he has the shortest tenure as the governor general.
**1958**- Malik Feroz Khan Noon secured the Gawader from Oman.

**October 1958 -** General Ayub Khan dismissed Iskander Mirza in the first successful coup of the
Country.

**February 1960** - In February, the name of Islamabad was decided by the Presidential Cabinet of Pakistan.

**July 1960** - President Ayub Khan laid the foundation stone for the Quaid-i-Azam Mausoleum on July 31, 1960.
**1961** - The Government of Pakistan decided to adopt the decimal system for its coinage. The rupee was divided into hundred paisas. New coins of one paisa, five paisa, & ten paisa were minted with the same devices and style.

**1963 Sino-Pakistan Agreement-** (also known as the Sino-Pakistan Frontier Agreement and Sino-Pak Boundary Agreement) is a 1963 document between the governments of Pakistan and China establishing the border between those countries.it wa settled by the diplomatic efforts of Z.A Bhutto.

**November 1964** - On 26 November 1964, after an introduction by Syed Wajid Ali, the first-ever news broadcast of Pakistan's history was aired. It was a black and white transmission by PTV.

**January 1965 -** Ayub Khan defeated Fatima Jinnah, sister of Quaid e Azam Muhammad Ali Jinnah and re-elected as president.

**1966** - The Government of Pakistan awarded Hilal-i-Istaqlal to three cities, namely; Lahore, Sargodha and Sialkot. They were awarded as such for their courageous resistance against enemies during the Indo-Pakistani War of 1965. Owing to this, on every Defence Day (6 September), the flag is hoisted in these cities in recognition of the bravery of the people of these cities.

**January 1966** - The Tashkent Declaration was signed on 10 January 1966. It was a peace agreement between the two countries that resolved the Indo-Pakistani War of 1965. The Soviets, represented by Premier Aleksey Kosygin, moderated between the then Indian PM Lal Bahadur Shastri and the then Pakistani President Muhammad Ayub Khan.

**1966** - The six-point movement was initiated in East Pakistan, led by Sheikh Mujibur Rahman, the purpose of which was greater autonomy for East Pakistan. The six demand of the movements were designed to put an end to the perceived exploitation of East Pakistan by the West Pakistani rulers.

**August 1967** - Islamabad replaced Karachi and officially became the capital of Pakistan exactly 20 years after the country's independence, on the 14th of August 1967.

**1968** - The Agartala Conspiracy Case was a sedition case by the government of Pakistan against the Awami League, specifically against Sheikh Mujibur Rahman, the then leader of the Awami League and East Pakistan, and 34 other persons.

**March 1969 –** Ayub Khan handed over the powers to Army Chief General Yahya Khan. Yahya imposed martial law for the second time and dissolved all assemblies after protests led by politician Zulfiqar Ali Bhutto.

**October 1969** - Swat officially became a part of Pakistan on 14 October 1969.

**July 1970**: Balochistan was given the status of province in Pakistan

**December 1970** - First general elections held with the victory of Mujeeb-ur-Rehman (AL) in East Pakistan and Zulfiqar Ali Bhutto (PPP) in West Pakistan.

**March 1971 –** Tensions raised between East Pakistan and West Pakistan. Mujeeb-ur-Rehman was arrested on the orders of Yahya Khan.

**December 1971 –** Bangladesh separated because of the war of 1971. Zulfikar Ali Bhutto was elected as president.
**January 1972-** Pakistan left the Commonwealth.

**April 1972** - Zulfikar Ali Bhutto convened the National Assembly on 14 April, repealed the martial law on 21 April and instructed the legislators with writing a new constitution for Pakistan.

**July 1972** - The Simla Agreement was signed between Pakistan and India on the 2nd of July 1972 in India. It followed from the 1971 War. The purpose of the agreement was to "put an end to the conflict and confrontation that have hitherto marred their relations". Based on the agreement, the Line of Control (LOC) came into existence, which was previously called the "ceasefire line."

**August 1972** - Bangladesh released Pakistani POWs of the 1971 War on August 2, 1972.

**July 1973** - Pakistan Steel Mills was established on July 2, 1973.

**August 1973** - New constitution came into effect. It gave the power of decision making to the prime minister and rendering the president as a figurehead. Bhutto became the prime minister and Fazal Ellahi the president.

**1973** - The National Registration Authority was established in 1973. The first national identity card was issued to Zulfiqar Ali Bhutto, by this authority.

**February 1974** - Pakistan recognized Bangladesh in February of 1974.

**1974** - Hunza officially became a part of Pakistan in 1974.

**March 1977 -** General elections saw a victory for Bhutto's PPP amidst the rigging allegations.
**July 1977 -** Bhutto deposed by the then army chief General Zia ul Haq and arrested on charges of authorizing a murder of a political opponent. Zia declared martial law in the country.

**April 1979 -** Bhutto was hanged in Rawalpindi after a controversial trial on charges of corruption and extrajudicial killings.

**1982** - Under Zia-ul-Haq's Zakat & Ushr Ordinance, Ushr collection began from Rabi crops of 1982-83.

**1985** – General Zia-ul-Haq lifted the martial law imposed in Pakistan on July 1977.

**February 1985 -** General elections are held on a non-party basis. Zia becomes the president as Muhammad Khan Junejo is appointed as the prime minister. The new national assembly ratified Zia's actions over the last eight years.

**1988** - The foundation stone for the Faisal Mosque, designed by the Turkish Architect Vedat Dalokay, was laid by King Khalid bin Abdul Aziz in 1976, and the project was started in 1978. The Mosque was finally completed in 1986, and the first prayers were offered in 1988.

**August 1988** - Zia died, along with 31 others, including the US ambassador, in a plane crash.

**November 1988 -** Benazir Bhutto, daughter of Zulfiqar Ali Bhutto, won elections. She became the first female prime minister of the country.

**May 1990** - The Nishan-e-Pakistan, the highest civil award and decoration of Pakistan, was awarded on 19 May 1990 to Morarji Desai, the Prime Minister of India.

**August 1990 -** President Ghulam Ishaq Khan sacked Benazir's government on charges of corruption.

**October 1990 -** Nawaz Sharif became prime minister after the Islami Jamhoori Ittihad (IJI) a coalition of religious parties and the Pakistan Muslim League won the elections.
**April 1993 -** Ghulam Ishaq Khan dismissed Sharif's government on charges of corruption.
**July 1993 -** Ghulam Ishaq Khan resigned.

October 1993 - Benazir elected as the prime minister for the second time.

**November 1993 -** Farooq Leghari elected as the president of Pakistan.

**January 1994** - On January 25, Benazir Bhutto inaugurated Pakistan's first women police station in the capital, Islamabad.

**November 1996 –** Farooq Leghari dismissed Benazir's government on corruption charges.

**February 1997 –** Nawaz Sharif became prime minister for the second time after his party PML-N won general elections.

**May 1998** - At 15:15 hrs. PST on the 28th of May 1998, five simultaneous underground nuclear tests were conducted by Pakistan at Ras Koh Hills in the Chagai District of Balochistan Province. The tests were code named 'Chagai-I', and it was Pakistan's first public test of nuclear weapons.

**May 1999-** Kargil war started.

**October 1999 -** Chief of Army Staff General Pervez Musharraf staged a coup to topple the civilian government of Nawaz Sharif.

**March 2000** - National Database and Registration Authority (NADRA) was established on 10 March 2000.

**May 2000 -** Supreme Court justices who took their oath under a Provisional Constitutional Order validated the military coup in the country.

**June 2001** - General Musharraf became president while holding the post of chief of army staff.

**July 2001** - On July 14 (till July 16), The Agra Summit took place, which was a two-day summit meeting between the Indian PM Atal Bihari Vajpayee and General Perzev Musharraf, the then President of Pakistan. The aim of the summit was resolving long-standing issues between the two countries.

**April 2002** - Musharraf held a referendum as the president. He won the majority.

**October 2002** - General elections held under Musharraf's military government. Pakistan Muslim League-Q won most seats. Zafar Ullah Khan Jamali was sworn in as prime minister.

**March 2004** – In March, the US formally declared Pakistan as one of its most important allies outside NATO.

**August 2004** - Shaukat Aziz replaced Zafar Ullah Khan Jamali as the prime minister.

**October 2007** - Karsaz Bomb blast at PPP's reception rally for Benazir as she returned to the country for elections after a reconciliation deal with Musharraf following an eight-year exile.

**December 2007** - Benazir assassinated in a gun and bomb attack after addressing a campaign rally at Liaquat Bagh in Rawalpindi.

**February 2008** - Yousuf Raza Gilani elected as prime minister as the PPP won general elections.

**September 2008** - Asif Ali Zardari, the widower of Benazir Bhutto elected as the president.

**April 2010** - Zardari handed over the power to dissolve assemblies to the prime minister through the eighteenth amendment.

**June 2012 -** Supreme Court of Pakistan disqualified PM Gilani from his post after finding him in contempt of court.

**June 2012 -** Raja Parvez Ashraf of the PPP sworn in as prime minister.

**2013-2015** - The key agreement for the projects to be listed under the China Pakistan Economic Corridor (CPEC) was signed in 2013, and term sheets for them were signed during President Xi Jinping's visit to Pakistan in 2015.

**May 2013** - General elections held in Pakistan

**June 2013 -** Nawaz Sharif became prime minister for the third term after his party PML-N won the polls by 2/3rd majority.

**December 2014** - Peshawar school massacre took place on 16th of December, 2014. It was a major terrorist attack in which several armed assailants attacked the Army Public School (APS) Peshawar. The attack ended up killing 150 people, of whom at least 134 were students.

**January 2015** - The National Action Plan is a 20-point action plan established in January 2015 to crack down on terrorism in the then-FATA region of KPK. It was formulated after the Peshawar APS massacre.

**December 2016** - The 'Pakistan Gate' was inaugurated on 21st December, near the Pak-Iran border at Taftan.

**July 2017** – Nawaz Sharif resigned from office after Supreme Court disqualified him over a corruption case related to ownership of luxury flats in London.

**August 2017** - PML-N's Shahid Khaqan Abbasi became prime minister of Pakistan.

**July 2018** – Nawaz Sharif and his daughter Maryam Nawaz arrested after their return to Lahore from London.

**July 2018 -** Election held in Pakistan.

**August 2018 –** Former captain of Pakistani cricket team Imran Khan became the 22nd Prime Minister of Pakistan with the motto of change.

**April 09-2022 –**Prime Minister Imran Khan ousted in no confidence vote.

**April 11-2022 –**Shabaz Shreef elected as 23rd Prime Minister of Pakistan.

**August 09-2023 –**National Assembly dissolved to hold fresh elections.

# Political/Governmental Setup of Pakistan

The major political parties based on the 2018 General Elections in Pakistan:

| Sr. # | Name of Party | General Seats won | Women Seats Won | Minority Seats Won | Total Seats Won |
|---|---|---|---|---|---|
| 1 | Pakistan Tehreek-e-Insaf | 116 | 28 | 5 | 149 |
| 2 | Pakistan Muslim League (N) | 64 | 16 | 2 | 82 |
| 3 | Pakistan Peoples Party | 43 | 9 | 2 | 54 |
| 4 | Muttahida Majlis-e-Amal | 12 | 2 | 1 | 15 |
| 5 | Tehreek-i-Labbaik Pakistan | 0 | 0 | 0 | 0 |
| 6 | Grand Democratic Alliance | 2 | 1 | 0 | 3 |
| 7 | Awami National Party | 1 | 0 | 0 | 1 |
| 8 | Muttahida Qaumi Movement | 6 | 1 | 0 | 7 |
| 9 | Pakistan Muslim League (Q) | 4 | 1 | 0 | 5 |
| 10 | Balochistan Awami Party | 4 | 1 | 0 | 5 |
| 11 | Balochistan National Party (Mengal) | 3 | 1 | 0 | 4 |

**The number of seats in the provincial assemblies of Pakistan:**

- Sindh: 168
- Punjab: 371
- KPK: 124
- Balochistan: 65

## Seat Distribution in Senate

**Note**: the minimum age of a senator under the 1973 constitution is 30 years.

| Provinces/Territories | General | Technocrats / Ulema | Women | Non-Muslims | Total |
|---|---|---|---|---|---|
| Sindh | 14 | 4 | 4 | 1 | 23 |
| Punjab | 14 | 4 | 4 | 1 | 23 |
| Balochistan | 14 | 4 | 4 | 1 | 23 |
| Khyber Pakhtunkhwa | 14 | 4 | 4 | 1 | 23 |
| Federal Capital | 2 | 1 | 1 | - | 4 |
| FATA | 4 | - | - | - | 4 |
| **TOTAL** | **62** | **17** | **17** | **4** | **100** |

***After FATA's merger in KPK, Senate's seats were reduced to 96. After current tenure in 2024, there will be no separate seats for FATA.**

## Seat Distribution in Parliament

| | Punjab | Sindh | Khyber Pakhtunkhwa | Balochistan | FATA | Federal Capital | Total |
|---|---|---|---|---|---|---|---|
| General | 148 | 61 | 35 | 14 | 12 | 2 | 272 |
| Women | 35 | 14 | 8 | 3 | 0 | 0 | 60 |
| Non-Muslims | -- | -- | -- | -- | -- | -- | 10 |
| **Total** | **183** | **75** | **43** | **17** | **12** | **2** | **342** |

After the dissolution of the current National Assembly, seats distribution will be according to Article 51 (1) and 3 (a) of the Constitution of Islamic Republic of Pakistan owing to FATA merger.

| | Punjab | Sindh | Khyber Pakhtunkhwa | Balochistan | Federal Capital | Total |
|---|---|---|---|---|---|---|
| General | 141 | 61 | 45 | 16 | 3 | 256 |
| Women | 32 | 14 | 10 | 4 | 0 | 60 |
| Non-Muslims | -- | -- | -- | -- | -- | 10 |
| **Total** | **173** | **75** | **55** | **20** | **3** | **336** |

## Composition of Pakistan's Parliament facts

According to the Constitution of Pakistan, 1973 Pakistan parliament is bicameral. According to Article 50 of the Constitution, the Parliament of Pakistan comprises a President and two Houses known as National Assembly (lower house) and Senate (upper house).

***sources used for the following data: senate.gov.pk***

***na.gov.pk***

### Miscellaneous

- **The Parliamentary Special Committee on Kashmir** is a committee formed with the aim of raising the Kashmir issue at national and international levels. It strives to unify all political elements within Pakistan and bring them on the same page regarding the pursuit of the Kashmir cause. It is mainly composed of senior MNAs and Senators.

- **The Council of Common Interests (CCI)** is a constitutional body in the Government of Pakistan. It is appointed by the President on the advice of the Prime Minister. The CCI resolves the disputes of power sharing between the federation and provinces. Membership of the Council of Common Interests consists of following:
  - The Prime Minister of Pakistan (Chairman of the Council)
  - All four Provincial Chief Ministers
  - Three members to be nominated by Prime Minister (Usually Cabinet members)

## Lists and Information Regarding Diplomats

**First five and most recent Pakistani ambassadors to the US (from the year 2000 onwards):**

| Sr. | Name of Ambassador | Date of Charge Assumption | Date of Charge Relinquishment |
|---|---|---|---|
| 1 | Mr. M.A. H. Ispahani | October 8, 1947. | February 8, 1952. |
| 2 | Mr. Muhammad Ali Bogra | February 27, 1952. | April 16, 1953. |
| 3 | Syed Aamjad Ali | September 26, 1953. | September 27, 1955. |
| 4 | Mr. Muhammad Ali Bogra | November,1955. | March, 1959. |
| 5 | Mr. Aziz Ahmed | March 23, 1959. | July 10, 1963. |

| Sr. # | Name of Ambassador | Date of Charge Assumption | Date of Charge Relinquishment |
|---|---|---|---|
| 1 | Dr. Maleeha Lodhi | December 17, 1999. | August 4, 2002. |
| 2 | Mr. Ashraf Jehangir Qazi | August 19, 2002. | August 6, 2004. |
| 3 | Gen® Jehangir Karamat | November 17, 2004. | June 3, 2006. |
| 4 | Maj. Gen® Mahmud Ali Durani | June 5, 2006. | May 9, 2008. |
| 5 | Mr. Husain Haqqani | May 27, 2008. | November 22, 2011. |
| 6 | Ms. Sherry Rehman | January 8, 2012. | May 19, 2013 |
| 7 | Mr. Jalil Abbas Jilani | December 28, 2013 | February 28, 2017 |
| 8 | Mr. Aizaz Ahmad Chaudhry | March 12, 2017 | May 29, 2018 |
| 9 | Mr. Ali Jehangir Siddiqui | May 29, 2018 | December 24, 2018 |
| 10 | Dr. Asad Majeed Khan | January 11, 2019 | February 2022 |
| 11 | Masood Khan | February 2022 | Incumbent |

### First five and the most recent US Ambassadors to Pakistan (from the year 2000 onwards):

- Paul H. Alling
  - Appointed: September 20, 1947
  - Terminated mission: Left post June 27, 1948
- H. Merle Cochran
  - Appointed: March 4, 1949
  - Took oath of office but did not proceed to post.
- Avra M. Warren
  - Appointed: February 2, 1950
  - Terminated mission: Left post November 26, 1952
- John M. Cabot
  - Appointed: September 17, 1952
  - Commissioned during a recess of the Senate; did not serve under this appointment.
- Horace A. Hildreth
  - Appointed: May 13, 1953
  - Terminated mission: Left post May 1, 1957
- James M. Langley
  - Appointed: June 13, 1957
  - Terminated mission: Left post July 29, 1959
- William B. Milam
  - Appointed: August 3, 1998
  - Terminated mission: Left post July 6, 2001
- Wendy Jean Chamberlin
  - Appointed: July 12, 2001
  - Terminated mission: Left post May 29, 2002
- Nancy Jo Powell
  - Appointed: August 2, 2002
  - Terminated mission: Left post November 5, 2004
- Ryan C. Crocker
  - Appointed: October 18, 2004
  - Terminated mission: Left post March 28, 2007
- Anne W. Patterson
  - Appointed: July 2, 2007
  - Terminated mission: Left post October 5, 2010
- Cameron Munter
  - Appointed: October 6, 2010
  - Terminated mission: Left post May 7, 2012
- Richard Olson
  - Appointed: September 24, 2012
  - Terminated mission: October 27, 2015
- David Hale
  - Appointed: September 21, 2015
  - Terminated mission: August 29, 2018
- Paul W. Jones
  - Appointed: September 2018 (Incumbent)

**Permanent Representatives of Pakistan to the United Nations:**

| Sr. | Name | Entered office | Left office |
|---|---|---|---|
| 1 | Syed Itaat Husain | 1948 | 1951 |
| 2 | Patras Bokhari | 1951 | 1954 |
| 3 | Prince Aly Khan | 1958 | 1960 |
| 4 | Muhammad Zafrullah Khan | 1961 | 1964 |
| 5 | Syed Amjad Ali | 1964 | 1967 |
| 6 | Agha Shahi | 1967 | 1972 |
| 7 | Iqbal Akhund | 1972 | ~1975 |
| 8 | Niaz A. Naik | 1978 | 1982 |
| 9 | Sardar Shah Nawaz | 1982 | 1989 |
| 10 | Jamsheed Marker | September 1990 | March 1995 |
| 11 | Ahmad Kamal | March 1995 | August 1999 |
| 12 | Inam-ul-Haq | August 1999 | February 2000 |
| 13 | Shamshad Ahmad | February 2000 | May 2002 |
| 14 | Munir Akram | May 2002 | September 2008 |
| 15 | Hussain Haroon | September 2008 | October 2012 |
| 16 | Masood Khan | October 2012 | January 2015 |
| 17 | Maleeha Lodhi | February 2015 | 30 September 2019 |
| 18 | Munir Akram | September 2019 | incumbent |

## Diplomatic Missions / Consulates / Embassies in Pakistan

### Embassies & High Commissions

- Afghanistan - Islamabad
- Algeria - Islamabad
- Argentina - Islamabad
- Australia - Islamabad
- Austria - Islamabad
- Azerbaijan - Islamabad
- Bahrain - Islamabad
- Bangladesh - Islamabad
- Belarus - Islamabad
- Belgium - Islamabad
- Bosnia and Herzegovina - Islamabad
- Brazil - Islamabad
- Brunei - Islamabad
- Bulgaria - Islamabad
- Canada - Islamabad
- China - Islamabad
- Cuba - Islamabad
- Czech Republic - Islamabad
- Denmark - Islamabad
- Egypt - Islamabad
- Eritrea - Islamabad
- France - Islamabad
- Germany - Islamabad
- Greece - Islamabad
- Holy See - Islamabad
- Hungary - Islamabad
- India - Islamabad
- Indonesia - Islamabad
- Iran - Islamabad
- Iraq - Islamabad
- Italy - Islamabad
- Japan - Islamabad
- Jordan - Islamabad
- Kazakhstan - Islamabad
- Kenya - Islamabad
- Korea (Democratic Republic) - Islamabad
- Korea (Republic) - Islamabad
- Kuwait - Islamabad
- Kyrgyzstan - Islamabad
- Lebanon - Islamabad
- Libya - Islamabad
- Malaysia - Islamabad
- Maldives - Islamabad
- Mauritius - Islamabad
- Morocco - Islamabad
- Myanmar - Islamabad
- Nepal - Islamabad
- Netherlands - Islamabad
- Nigeria - Islamabad
- Norway - Islamabad
- Oman - Islamabad
- Palestine - Islamabad
- Philippines - Islamabad
- Poland - Islamabad
- Portugal - Islamabad
- Qatar - Islamabad
- Romania - Islamabad
- Russia - Islamabad
- Saudi Arabia - Islamabad
- Somalia - Islamabad
- South Africa - Islamabad
- Spain - Islamabad
- Sri Lanka - Islamabad
- Sudan - Islamabad
- Sweden - Islamabad
- Switzerland - Islamabad
- Syria - Islamabad
- Tajikistan - Islamabad
- Thailand - Islamabad
- Tunisia - Islamabad
- Turkey - Islamabad
- Turkmenistan - Islamabad
- Ukraine - Islamabad
- United Arab Emirates - Islamabad
- United Kingdom - Islamabad
- United States - Islamabad
- Uzbekistan - Islamabad
- Vietnam - Islamabad
- Yemen - Islamabad

## CONSULATES IN PAKISTAN

- Afghanistan - Karachi, Consulate General
- Afghanistan - Peshawar, Consulate General
- Afghanistan - Quetta, Consulate General
- Australia - Karachi, Consulate
- Austria - Karachi, Consulate
- Austria - Lahore, Consulate
- Bahrain - Karachi, Consulate General
- Bangladesh - Lahore, Consulate General
- Bangladesh - Peshawar, Consulate General
- Belarus - Lahore, Consulate
- Belgium - Karachi, Consulate
- Belgium - Lahore, Consulate
- Bosnia and Herzegovina - Karachi, Consulate
- Brazil - Karachi, Consulate
- Brazil - Lahore, Consulate
- Brazil - Peshawar, Consulate
- Bulgaria - Karachi, Consulate
- Canada - Karachi, Consulate
- Canada - Lahore, Consulate
- Chile - Karachi, Consulate
- China - Karachi, Consulate General
- China - Lahore, Consulate General
- Cyprus - Islamabad, Consulate General
- Cyprus - Karachi, Consulate General
- Czech Republic - Karachi, Consulate
- Czech Republic - Lahore, Consulate
- Czech Republic - Peshawar, Consulate
- Denmark - Karachi, Consulate General
- Dominican Republic - Lahore, Consulate
- Equatorial Guinea - Karachi, Consulate
- Estonia - Islamabad, Consulate
- Ethiopia - Karachi, Consulate
- Fiji - Karachi, Consulate
- Finland - Islamabad, Consulate
- Finland - Karachi, Consulate General
- Finland - Lahore, Consulate
- France - Karachi, Consulate General
- Gambia - Karachi, Consulate
- Germany - Karachi, Consulate General
- Germany - Lahore, Consulate
- Greece - Karachi, Consulate
- Greece - Lahore, Consulate
- Hungary - Lahore, Consulate General
- Iceland - Islamabad, Consulate General
- Iceland - Karachi, Consulate General
- Indonesia - Karachi, Consulate General
- Indonesia - Lahore, Consulate
- Iran - Karachi, Consulate General
- Iran - Lahore, Consulate General
- Iran - Peshawar, Consulate General
- Iran - Quetta, Consulate General
- Ireland - Karachi, Consulate
- Italy - Karachi, Consulate
- Jamaica - Karachi, Consulate
- Japan - Karachi, Consulate General
- Japan - Lahore, Consulate General
- Japan - Peshawar, Consulate General
- Japan - Quetta, Consulate General
- Kenya - Karachi, Consulate
- Korea (Democratic Republic) - Karachi, Consulate General
- Korea (Republic) - Karachi, Consulate General
- Korea (Republic) - Peshawar, Consulate
- Korea (Republic) - Quetta, Consulate
- Kosovo - Lahore, Consulate
- Kuwait - Karachi, Consulate General
- Kyrgyzstan - Karachi, Consulate General
- Latvia - Islamabad, Consulate
- Latvia - Karachi, Consulate
- Lebanon - Karachi, Consulate
- Lesotho - Karachi, Consulate
- Lithuania - Islamabad, Consulate General
- Malaysia - Karachi, Consulate General
- Malaysia - Lahore, Consulate
- Maldives - Karachi, Consulate
- Maldives - Lahore, Consulate
- Malta - Karachi, Consulate General
- Malta - Lahore, Consulate
- Mauritius - Karachi, Consulate
- Mauritius - Lahore, Consulate
- Mexico - Karachi, Consulate
- Mexico - Lahore, Consulate
- Moldova - Lahore, Consulate General
- Monaco - Karachi, Consulate
- Morocco - Karachi, Consulate General
- Mozambique - Karachi, Consulate General
- Nepal - Karachi, Consulate General
- Netherlands - Karachi, Consulate
- Netherlands - Lahore, Consulate
- New Zealand - Karachi, Consulate General
- Niger - Karachi, Consulate
- Norway - Karachi, Consulate General
- Norway - Lahore, Consulate
- Oman - Karachi, Consulate General
- Papua New Guinea - Islamabad, Consulate
- Paraguay - Islamabad, Consulate General
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- Uganda - Karachi, Consulate
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- United States - Karachi, Consulate General
- United States - Lahore, Consulate General
- United States - Peshawar, Consulate General
- Uruguay - Islamabad, Consulate General
- Yemen - Karachi, Consulate General

### Other Representations in Pakistan

- Bangladesh - Karachi, Deputy High Commission
- European Union - Islamabad, Delegation
- United Kingdom - Karachi, Deputy High Commission
- United Kingdom - Lahore, Representative Office

### Embassies Accredited To Pakistan

- Bhutan - Dhaka
- Cambodia - New Delhi
- Cyprus - Tehran
- Equatorial Guinea - Beijing
- Madagascar – Riyadh

## Contemporary & Miscellaneous Events/Issues

### Kashmir and Article 370 Issue:

- Article 370 of the Constitution of India allowed the state of occupied Kashmir to operate with autonomy – such as having its own constitution, its own laws, a separate flag etc. It allowed the state to bar Indians from outside of Kashmir to purchase property within the region. Owing to these reasons, the article held special significance for the people of Kashmir.
- The state of occupied Kashmir was dealt a severe blow on the 5th of August, 2019, when the Indian government made all the provisions of the Indian Constitution applicable to the state of Jammu and Kashmir, through a Presidential Order. Another order was passed on the 6th of August. This second order rendered all the clauses of the Article 370 inoperative, barring clause 1. Also, the 'Jammu and Kashmir Reorganization Act, 2019' was passed, which divided the region into two union territories on the 31st of October, 2019. These two territories are now known as Union Territory of Jammu and Kashmir and Union Territory of Ladakh.
- The involvement of China in the Kashmir and Article 370 issue is owing to the fact that China administers Aksai Chin, a region in Kashmir which lies to the east of Indian occupied Ladakh. This region shall come under Indian rule due to the changes made, which is why it has become a controversy between the two countries as far as the administration of this area is concerned.

### Iran-Pakistan gas pipeline project (aka Peace pipeline)

The agreement was first signed in 1995 by Pakistan and Iran. Iran completed its section of the pipeline in 2011. The estimated total cost of the pipeline is $7 billion. The deal was originally conceived to deliver Iranian gas to India via Pakistan, but New Delhi withdrew from the agreement. The planned pipeline is expected to stretch around 2,700 kilometers, of which 1,220 will run through Iran.

### The Kartarpur Corridor

It is a visa-free border crossing which connects the Gurdwara Darbar Sahib in the Narowal district of Punjab, Pakistan to the border with India in Gurdaspur district, Punjab. The crossing allows Sikh devotees from India to visit the gurdwara in Kartarpur, Pakistan, located at a distance of about 4.7 kms from the India–Pakistan border. Pakistani Sikhs, however, are unable to use the border crossing, and cannot access Dera Baba Nanak on the Indian side without first obtaining an Indian visa or unless they work there. The Corridor was first proposed the then PM of India, Atal Bihari Vajpayee, and the then PM of Pakistan, Nawaz Sharif, in 1999, as part of the Delhi–Lahore Bus diplomacy. The foundation stone was laid down on the Indian side on 26th of November, 2018, and then two days later, on the 28 November, the Prime Minister of Pakistan, Imran Khan, laid the foundation stone on the Pakistani side. The corridor was finally completed on the 12th of November, 2019, for the 550th birth anniversary of Guru Nanak.

## General Elections in Pakistan

### General Elections Held in Pakistan

In Pakistan, since independence, 11 general elections have been held. Elections were also held in 1954 and 1962 but they were indirect and non-party based elections, respectively.

| Election Year | Elected Party | Premiers |
|---|---|---|
| 2018 | PTI | Imran Khan |
| 2013 | PML-N | Nawaz Shareef |
| 2008 | PPP | Yousaf Raza Gillani |
| 2002 | PML-Q | Zafarullah Khan Jamali |
| 1997 | PML-N | Nawaz Shareef |
| 1993 | PPP | Benazir Bhutto |
| 1990 | UI (Islami Jamhoori | Nawaz Shareef |

| | | |
|---|---|---|
| | Ittehad – 9 party alliance) | |
| 1988 | PPP | Benazir Bhutto |
| 1985 | Independent | Muhammad Khan Junejo |
| 1977 | PPP | Zulfiqar Ali Bhutto |
| 1970 | AL (Awami League from East Pakistan won but due to rising problems between Bangladesh and Pakistan, Bangladesh became an independent state in 1971) | Nurul Amin and later Zulfiqar Ali Bhutto (1973) after independence of Bangladesh from Pakistan. |

### General Elections voter turnout in Pakistan:

- GE 2018: 55.8 (highest in country's history so far)
- GE 2013: 55.02%
- GE 2008: 44.11%
- GE 2002: 41.68%

## Information Regarding the Constitution of Pakistan

### Commonly asked Amendments to the Constitution:

| | | |
|---|---|---|
| 1st | Redefined the boundaries of Pakistan and removed references to East Pakistan. | May 1974 |
| 2nd | Defined a Muslim and declared the status of Ahmadis as a minority and 'non-Muslim'. | September 1974 |
| 3rd | Extended the period of preventive detention. | February 1975 |
| 4th | Decreed additional seats for minorities, It also deprived courts of the power to grant bail to any person detained under any preventive detention. | November 1975 |
| 5th | Widened the scope of restriction on the High Courts. | September 1976 |
| 6th | Provided that the Chief Justice of the Supreme Court will be retired at the age of 65 and High Court judges at age 62. | December 1976 |
| 7th | Enables the Prime Minister to obtain a vote of confidence of the people of Pakistan. | May 1977 |
| 8th | Changed Pakistan's government from a parliamentary system to a Semi-presidential system by giving the President a number of additional powers. | November 1985 |
| 9th | Bill to impose Sharia law as the supreme law of the land. The bill was passed by the Senate but could never be passed by the National Assembly owing to the latter's dissolution. | 1985 (Not passed) |
| 10th | Fixed the interval period between sessions of the National Assembly to not exceed 130 days. | March 1987 |
| 11th | Revision of the reserved seats for women in the National and provincial assemblies. The bill was withdrawn in 1992. | 1989 (Not passed) |
| 12th | Created Speedy Trial Court for 3 years. | 1991 |
| 13th | Stripped the President of Pakistan of his reserve power to dissolve the National Assembly of Pakistan, and thereby triggering new elections and dismissing the Prime Minister. | 1997 |
| 14th | Allowed members of parliament to be dismissed if they defect. | July 1997 |
| 15th | Bill to impose Sharia law as supreme law of the land. Was never passed. | 1998 (Not passed) |
| 16th | Increased the term appointed for the quota system of minorities as per the 1973 Constitution from 20 to 40 years. | 1999 |
| 17th | Made changes dealing with the office of the President and the reversal of the effects of the Thirteenth Amendment. | 2003 |
| 18th | Removed the power of the President of Pakistan to dissolve the Parliament unilaterally. It involves implications for provincial autonomy. | Passed by NA:8 April 2010. Passed by Senate: 15 April 2010. 19th April 2010 |
| 19th | Provided for the appointment of the Judges of the Supreme Court of Pakistan and made amendments in the number of members of the parliamentary committee for the appointment of Chief Electoral Officers at Election Commission of Pakistan. | December 2010 |
| 20th | For Free and Fair Elections. | February 2012 |
| 21st | For Speedy Trial Military Courts to deal with terrorism | January 2015 |
| 22nd | ECP powers deputed to Chief Election Commissioner | June 2016 |

| | | |
|---|---|---|
| 23rd | The 23rd Amendment was passed to re-establish the military courts for further two years till 6 January 2019. In 2015, the National Assembly passed the 21st Amendment and created the military courts for a period of 2 years. The period of two years expired on 6 January 2017 hence this 23rd Amendment was passed to re-establish the military courts for further two years till 6 January 2019. | January 2017 |
| 24th | Reallocation of National Assembly seats among federating units and allowing election authorities to update boundaries of constituencies based on provisional results of the 2017 Census of Pakistan. | December 2017 |
| 25th | Merges Federally Administered Tribal Areas with Khyber Pakhtunkhwa | May 2018 |
| 26th | Under this amendment, NA will retain 12 seats of tribal districts while their seats in the KP assembly increased to 21 from 16 | May 2019 |

## A brief list of commonly asked Articles of the Constitution of Pakistan:

| Article | Explanation |
|---|---|
| Article 9 | No person shall be deprived of the liberty of life |
| Article 10-A | Right to free trial |
| Article 15 | Freedom of Movement |
| Article 19 | Freedom of Speech |
| Article 20-A | Every citizen has a right to profess, practice, and practice its religion |
| Article 25 | Equality of citizenship |
| Article 25-A | Provision of free education to children of age between 5-16. |
| Article 34 | It covers Women's rights in Pakistan. |
| Article 35 | The State shall protect the marriage, the family, the mother and the child. |
| Article 39 | Participation of people in the Armed Forces. |
| Article 42 | Oath of President before Chief Justice |
| Article 62-63 | Deals with eligibility criteria for the parliamentarians. |
| Article 136 | Vote of No Confidence against Chief Minister |
| Article 189 | The decision of the Supreme Court binding on other courts |
| Article 245 | The function of the Armed Forces |
| Article 251 | Urdu as the official language |

## Facts (Constitutional History)

- The Objective Resolution was 12 March 1949. The Objectives Resolution serves as the preamble to all the constitutions in Pakistan's history. It hence acts as a sort of 'Magna Carta' or guiding charter of (and for) all constitutional matters.
- The first constituent assembly of Pakistan was headed by Quaid-e Azam. It first convened on 11 August 1947, It had 69 seats but later on increased to 79. Maulvi Tameezudin was Deputy President of the first constituent assembly.
- The Constituent Assembly adopted the 1956 Constitution on 29 February 1956.
- The Constitution of Pakistan 1956 was passed on 23 March 1956 and the first time used the name "Islamic Republic of Pakistan". It was prepared by the second constituent assembly headed by Chaudhry Muhamad Ali.
- It had 234 articles.
- Under 1956 Constitution, Parliament was unicameral. The legislative powers were vested in the Parliament, which was composed of the President and the National Assembly comprising 300 Members, which were divided equally between East and West Pakistan. In addition, five seats were reserved for women from each wing, for a ten-year period. Thus, the total membership of the House was 310.
- The minimum age set for the President of Pakistan under the 1956 Constitution was forty years. In addition, he had to be a Muslim.
- The Constitution of Pakistan 1956 was abrogated by Iskander Mirza on 7 October 1958.
- The 1962 Constitution was implemented on 8 June 1962 by Gen. Ayub Khan and it had 250 articles. It was abrogated on 26 March 1969.
- LFO 1970 was issued by Gen Yahya Khan and it paved the way for the first direct elections in Pakistan.
- The 1973 Constitution was unanimously passed by the Assembly in its session on 10th April 1973 and was authenticated by the President on 12th April 1973.
- The 1973 Constitution of Pakistan came into force on 14th August 1973. It declared Islam as the religion of the state for the first time.
- There are 280 articles in the Constitution of Pakistan 1973.
- The Provisional Constitutional Order (1981), popularly known as PCO, is an emergency and extra-constitutional order that suspends either wholly or partially the Constitution of Pakistan— the supreme law of land. The PCO fulfills and act as the temporary order while the constitution is held in abeyance or suspension.
- In November 1985, the 8th Constitutional Amendment was adopted by the Parliament. It was the largest and most detailed amendment.
- Article 58-2(b) allowed the President to dissolve the National Assembly and elected governments. It was inserted into the Constitution through the 8th Amendment, in the year 1985. It was removed through the 13th Amendment in 1997.

| Constitution Implemented | 1956 | 1962 | 1973 |
|---|---|---|---|
| | 23 March 1956 | 8 June 1962 | 14 August 1973 |
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| National Language | Urdu, Bengali | Urdu, Bengali | Urdu |
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## Facts (Constitutional Content)

- The five schedules of the Constitution of Pakistan each deal with the following,
  i. **First Schedule:** Laws exempted from the operation of Article 8 (1) and (2)
  ii. **Second Schedule:** Election of President
  iii. **Third Schedule:** Oaths of Office
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  v. **Fifth Schedule:** Remuneration and Terms and Conditions of Service of Judges
- Currently, the Constitution has one list of powers for the distribution of powers between the Provinces and Federation, i.e. The Federal Legislative List, given in the Fourth Schedule of the Constitution of Pakistan. The Concurrent List and all its entries were removed in the 18th Amendment to the Constitution of Pakistan.
- According to Article 239 of the Constitution of Pakistan, a bill to amend the constitution requires a two-thirds majority in both houses.
- Procedure to Repeal an Ordinance promulgated by the President: According to Article 89 of the Constitution of Pakistan, an Ordinance promulgated by the President shall stand "repealed at the expiration of [one hundred and twenty days] from its promulgation or, if before the expiration of that period a resolution disapproving it is passed by the Assembly, upon the passing of that resolution."
- According to Article 91 of the Constitution of Pakistan, "The Prime Minister shall be elected by the votes of the majority of the total membership of the National Assembly."
- The Constitution of Pakistan mandates that a national census is to be held after every ten years.
- Article 6 of the Constitution of Pakistan deals with high treason. It states that, "Any person who abrogates or subverts or suspends or holds in abeyance, or attempts or conspires to abrogate or subvert or suspend or hold in abeyance, the Constitution by use of force or show of force or by any other unconstitutional means shall be guilty of high treason."
- Article 245 deals with the concept of Armed Forces 'acting in aid of civil power'.

## Quick fact:

- On the advice of the prime minister and chief ministers, the president and governor are bound to dissolve the assemblies within 48 hours.
- The tenure of the National Assembly is of five years. The tenure of the Members of the National Assembly is the same, but it may end sooner in case the Member resigns or passes away.
- The Chairman Senate assumes the office of the President if his term ends early or during his absence. Next in the line of succession after the Chairman Senate, is the Speaker of the National Assembly.
- Facts about the Senate:
  - First convened in 1973, Article 59 of the Constitution of Pakistan determines the composition and powers of the Senate.
  - Each member of the Senate serves a six-year term.
  - The minimum age for a Senator under the 1973 Constitution is 30 years.
  - The Senate has several exclusive powers which are not granted to the National Assembly. These include the power of making parliamentary bills as a being enforced into law.
  - The Constitution does not allow for the dissolution of the Senate.

# International Organizations & Pakistan

**Participation & Membership of International Organizations**

| | |
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| ADB | Asian Development Bank |
| APO | Asian Productivity Organization |
| C | Commonwealth |
| CCC | Customs Cooperation Council |
| CP | Colombo Plan |
| ECO | Economic Cooperation Organization |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| FAO | Food and Agriculture Organization |
| G-9 | Group of 9 |
| G-24 | Group of 24 |
| G-77 | Group of 77 |
| IAEA | International Atomic Energy Agency |
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## Facts (Constitutional Content)

- The five schedules of the Constitution of Pakistan each deal with the following,
  i. **First Schedule:** Laws exempted from the operation of Article 8 (1) and (2)
  ii. **Second Schedule:** Election of President
  iii. **Third Schedule:** Oaths of Office
  iv. **Fourth Schedule:** Legislative Lists
  v. **Fifth Schedule:** Remuneration and Terms and Conditions of Service of Judges
- Currently, the Constitution has one list of powers for the distribution of powers between the Provinces and Federation, i.e. The Federal Legislative List, given in the Fourth Schedule of the Constitution of Pakistan. The Concurrent List and all its entries were removed in the 18th Amendment to the Constitution of Pakistan.
- According to Article 239 of the Constitution of Pakistan, a bill to amend the constitution requires a two-thirds majority in both houses.
- Procedure to Repeal an Ordinance promulgated by the President: According to Article 89 of the Constitution of Pakistan, an Ordinance promulgated by the President shall stand "repealed at the expiration of [one hundred and twenty days] from its promulgation or, if before the expiration of that period a resolution disapproving it is passed by the Assembly, upon the passing of that resolution."
- According to Article 91 of the Constitution of Pakistan, "The Prime Minister shall be elected by the votes of the majority of the total membership of the National Assembly."
- The Constitution of Pakistan mandates that a national census is to be held after every ten years.
- Article 6 of the Constitution of Pakistan deals with high treason. It states that, "Any person who abrogates or subverts or suspends or holds in abeyance, or attempts or conspires to abrogate or subvert or suspend or hold in abeyance, the Constitution by use of force or show of force or by any other unconstitutional means shall be guilty of high treason."
- Article 245 deals with the concept of Armed Forces 'acting in aid of civil power'.

## Quick fact:

- On the advice of the prime minister and chief ministers, the president and governor are bound to dissolve the assemblies within 48 hours.
- The tenure of the National Assembly is of five years. The tenure of the Members of the National Assembly is the same, but it may end sooner in case the Member resigns or passes away.
- The Chairman Senate assumes the office of the President if his term ends early or during his absence. Next in the line of succession after the Chairman Senate, is the Speaker of the National Assembly.
- Facts about the Senate:
  - First convened in 1973, Article 59 of the Constitution of Pakistan determines the composition and powers of the Senate.
  - Each member of the Senate serves a six-year term.
  - The minimum age for a Senator under the 1973 Constitution is 30 years.
  - The Senate has several exclusive powers which are not granted to the National Assembly. These include the power of making parliamentary bills as a being enforced into law.
  - The Constitution does not allow for the dissolution of the Senate.

# International Organizations & Pakistan

**Participation & Membership of International Organizations**

| | |
|---|---|
| ADB | Asian Development Bank |
| APO | Asian Productivity Organization |
| C | Commonwealth |
| CCC | Customs Cooperation Council |
| CP | Colombo Plan |
| ECO | Economic Cooperation Organization |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| FAO | Food and Agriculture Organization |
| G-9 | Group of 9 |
| G-24 | Group of 24 |
| G-77 | Group of 77 |
| IAEA | International Atomic Energy Agency |
| IBRD | International Bank for Reconstruction and Development (World Bank) |
| ICAO | International Civil Aviation Organization |
| ICC | International Chamber of Commerce |
| ICFTU | International Confederation of Free Trade Unions |
| ICRM | International Red Cross and Red Crescent Movement |
| IDA | International Development Association |

| | 1956 | 1962 | 1973 |
|---|---|---|---|
| Constitution Implemented | 23 March 1956 | 8 June 1962 | 14 August 1973 |
| Name of Pakistan | Islamic Republic of Pakistan | Republic of Pakistan | Islamic Republic of Pakistan |
| System of Governance | Parliamentary | Presidential | Parliamentary |
| Head of State | Prime Minister | President | Prime Minister |
| Legislature | Unicameral | Unicameral | Bicameral |
| National Language | Urdu, Bengali | Urdu, Bengali | Urdu |
| Articles | 234 | 250 | 280 |
| Schedules | 6 | 3 | 5 |
| Abrogated On | 7 October 1958 | 26 March 1969 | - |
| Abrogated By | President Iskander Mirza | President Yahya Khan | - |

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| IDA | International Development Association |

| | |
|---|---|
| IDB | Islamic Development Bank |
| IFAD | International Fund for Agricultural Development |
| IFC | International Finance Corporation |
| IFRCS | International Federation of Red Cross and Red Crescent Societies |
| IHO | International Hydrographic Organization |
| ILO | International Labour Organisation |
| IMF | International Monetary Fund |
| IMO | International Maritime Organization |
| Inmarsat | International Mobile Satellite Organization |
| Intelsat | International Telecommunications Satellite Organization |
| Interpol | International Criminal Police Organization |
| IOC | International Olympic Committee |
| IOM | International Organization for Migration |
| ISO | International Standards Organization |
| ITU | International Telecommunication Union |
| MINURSO | United Nations mission for the Referendum in Western Sahara |
| MONUC | United Nations Organization Mission in the Democratic Republic of the Congo |
| NAM | Non-Aligned Movement |
| OIC | Organization of the Islamic Conference |
| OPCW | Organization for the Prohibition of Chemical Weapon |
| PCA | Permanent Court of Arbitration |
| SAARC | South Asian Association for Regional Corporation |
| UN | United Nations |
| UNAMSIL | United Nations Missions in Sierra Leone |
| UNCTAD | United Nations Conference of Trade and Development |
| UNESCO | United Nations Educational, Scientific, and Cultural Organization |
| UNHCR | United Nations High Commissioner for Refugees |
| UNIDO | United Nations Industrial Development Organization |
| UNIKOM | United Nations Iraq-Kuwait Observation Mission |
| UNITAR | United Nations Institute for Training & Research |
| UNMIBH | United Nations Missions in Bosnia and Herzegovina |
| UNMIK | United Nations Interim Administration Mission in Kosovo |
| UNMOGIP | United Nations Military Observer Group in India and Pakistan |
| UNOMIG | United Nations Observer Mission in Georgia |
| UNMOP | United Nations Observer Mission in Prevlaka |
| UNTAET | United Nations Transitional Administration in East Timor |
| UPU | Universal Postal Union |
| WCL | World Confederation of Labour |
| WFTU | World Federation of Trade Unions |
| WHO | World Health Organization |
| WIPO | World Intellectual Property Organization |
| WMO | World Meteorological Organization |
| W to O | World Tourism Organization |
| WTO | World Trade Organization |

## Some international organizations along with Pakistan's membership/joining date:

- Asian Development Bank (ADB) in 1966.
- Association of Southeast Asian Nations Regional Forum (ARF) in 1996.
- Colombo Plan in 1951.
- Commonwealth of Nations. Joined in 1947 (left in 1972 & rejoined in 1989)
- Central Treat Organization (CENTO) in 1955. It was dissolved in 1979.
- Economic Cooperation Organization (ECO) in 1985.
- Food & Agriculture Organization (FAO) on September 7, 1947.
- International Atomic Energy Agency (IAEA) in 1957.
- International Bank for Reconstruction and Development (IBRD) in 1950
- International Chamber of Commerce (ICC) in 1955.
- International Civil Aviation Organization (ICAO) in 1974.
- International Criminal Police Organization (Interpol) in 1952.
- International Fund for Agricultural Development (IFAD) in 1978.
- International Labour Organization (ILO) in 1947.
- International Maritime Organization (IMO) in 1958.
- International Monetary Fund (IMF) in July 1950.
- International Olympic Committee (IOC) in 1948.
- International Organization for Migration (IOM) in 1992.
- Islamic Development Bank (IDB) in 1974
- Nonaligned Movement (NAM) in 1977.
- Organization of Prohibition of Chemical Weapons (OPCW) in 1993.
- Organization of Islamic Conference (OIC) in 1969.
- Shanghai Cooperation Organization (SCO) on June 9, 2017.
- Southeast Asia Treaty Organization (SEATO) in 1954. SEATO was dissolved on June 30, 1977
- South Asian Association for Regional Cooperation (SAARC) in 1985.
- United Nations on 30th September, 1947.
- United Nations Education, Scientific and Cultural Organization (UNESCO) on 14th September 1949.
- United Nations Industrial Development Organization (UNIDO) in 1985.
- Universal Postal Union (UPU) in 1947.
- World Intellectual Property Organization (WIPO) in 1977.
- World Trade Organization (WTO) on 1st January 1995
- Association of Southeast Asian Nations (ASEAN) in 2005

# Pakistani Media

## Facts about Radio Pakistan:

- Radio Pakistan serves is the national public broadcaster for radio in the country. It is the oldest existing broadcasting network in Pakistan. It was established on the 14th of August, 1947.
- It broadcasts on the channels FM 101 and FM 93.
- It was originally known as the Pakistan Broadcasting Service at the time of its inception.
- On the night between August 14 and 15, 1947, the first announcement was made from Lahore by Mustafa Ali Hamdani, followed by a similar announcement in English by Zahoor Azar, who went on to become the Director General of Radio Pakistan. Abdullah Jan Maghmoom made the announcement from Peshawar in Pashto.
- At the time of partition, there were only three radio stations in Pakistan; one in Dhaka, one in Lahore, and one in Peshawar.
- On December 20, 1972 it was changed to Pakistan Broadcasting Corporation (PBC). Radio services include Radio Pakistan and the television operations (Pakistan Television Corporation) include PTV Bolan, PTV Global, PTV Home, PTV National, PTV News, PTV Sports and PTV World. The PBC also operates television services for Azad Jammu & Kashmir under AJK TV.
- Following is a list of some broadcasting stations of the PBC, and their dates of establishment:

| Sr. | Name of Stations | Date of Inception / Inauguration |
|---|---|---|
| 1. | PBC Islamabad | 17th May, 1977 |
| 2. | PBC Peshawar | 6th March, 1935 |
| 3. | PBC Bannu | 26th June, 2005 |
| 4. | PBC Chitral | 1st August, 1993 |
| 5. | PBC D. I. Khan | 15th January, 1981 |
| 6. | PBC Abbottabad | 21st March, 1991 |
| 7. | PBC Kohat | 12th June, 2005 |
| 8. | PBC Lahore | 16th December, 1937 |
| 9. | PBC Multan | 21st November, 1970 |
| 10. | PBC Mianwali | 19th June, 2005 |
| 11. | PBC Bahawalpur | 18th August, 1975 |
| 12. | PBC Sargodha | 19th May, 2005 |
| 13. | PBC Rawalpindi | 1st September, 1950 |
| 14. | PBC Faisalabad | 15th September, 1982 |
| 15. | PBC Karachi | 31st July, 1948 |
| 16. | PBC Hyderabad | 17th August, 1955 |
| 17. | PBC Mithi | 19th September, 2005 |
| 18. | PBC Bhit Shah | 13th December, 2008 |
| 19. | PBC Larkana | 24th September, 1995 |
| 20. | PBC Khairpur | 21st March, 1983 |
| 21. | PBC Quetta | 17th October, 1956 |
| 22. | PBC Khuzdar | 17th June, 1981 |
| 23. | PBC Zhob | 21st April, 1998 |
| 24. | PBC Turbat | 4th January, 1981 |
| 25. | PBC Gwadar | 1st June, 2004 |
| 26. | PBC Loralai | 20th July, 1996 |
| 27. | PBC Sibbi | 1st October, 1989 |
| 28. | PBC Gilgit | 2nd April, 1979 |
| 29. | PBC Skardu | 16th April, 1979 |
| 30. | AJK Radio Muzaffarabad | 15th October, 1960 |
| 31. | AJK Radio Trarkhel | 16th April, 1948 |
| 32. | AJK Radio Mirpur | 30th September, 2002 |

## Prominent newspapers in Pakistan:

- Nawaiwaqt ('The Voice of Time') is an Urdu daily newspaper in Pakistan. It was launched in March of 1940, under the leadership of Hameed Nizami.
- The Daily Jang is an Urdu newspaper based in Karachi. It is the oldest newspaper of Pakistan, being continuously published ever since its establishment in 1939. In addition to being published from major Pakistani cities like Karachi, Lahore etc, it is also published from Birmingham, UK.
- Dawn is the largest and oldest English-language newspaper in Pakistan. It was founded by Quaid-i-Azam Mohammad Ali Jinnah as a mouthpiece for the Muslim League, in Delhi on the 26th of October, 1941. The first issue was printed at Latifi Press in 1942.
- The News International is the largest English language newspaper in Pakistan. In addition to being published in Pakistan, n overseas edition is published from London as well.

## Miscellaneous Facts about Pakistani Media

- **First Television Transmission/First Color Transmission:** Pakistan's first ever television transmission was broadcast from Lahore in November 1964. A second television broadcast center was opened in Dhaka in 1965 (then the capital of East Pakistan). A third was established in Rawalpindi-Islamabad in 1965 and the fourth in Karachi in 1966. PTV began color transmission in the year 1976.
- Roznama Imroz is the first Urdu newspaper of Pakistan.
- 'Teri Yaad' was the first-ever feature film released on 7 August 1948 in Pakistan after the partition of India, on Eid.
- 'Beyond the Last Mountain' is Pakistan's first English language film, released in 1976. An Urdu language version was released under the title 'Musafir'. The film was written and directed by Javed Jabbar.

# Art & National Heritage of Pakistan

## List of museums and art galleries in Pakistan:

| Sr. | Name of Museum | Established | Province |
|---|---|---|---|
| 1 | Quetta Museum, Quetta | 1972 | Balochistan |
| 2 | Peshawar Museum | 1947 | Khyber Pakhtunkhwa |
| 3 | University Museum-Peshawar | 1995 | |
| 4 | Chakdara Museum | 1960 | |
| 5 | Archaeological Museum, Saidu Sharif, Swat. | 1963 | |
| 6 | Archaeological Museum Taxila, Distt. Rawalpindi | 1990 | Punjab |
| 7 | Armoury Museum, old Fort, Lahore | 1928 | |
| 8 | Mughal and Sikh Galleries | 1928 | |

| | | | |
|---|---|---|---|
| | in Lahore-Fort | | |
| 9 | Archaeological Museum, Harappa, Distt: Sahiwal | 1965 | |
| 10 | Allama Iqbal Museum, Javed Manzil, Lahore. | 1967 | |
| 11 | Museum-cum-Library at Iqbal Manzil, Sialkot. | 1977 | |
| 12 | Bahawalpur Museum, Bahawalpur | 1977 | |
| 13 | Faqirkhana Museum, Lahore, (Private) | - | |
| 14 | Chughatai Museum, Lahore, (Private) | - | |
| 15 | Shakir Ali Museum, Lahore, (Private) | - | |
| 16 | Arts & Craft Museum Lahore, (Punjab govt.) | - | |
| 17 | Science Museum-Lahore, | - | |
| 18 | Lokvirsa Museum-Islamabad | 1982 | Islamabad Capital Territory |
| 19 | Natural History Museum-Islamabad | 1976 | |
| 20 | National Museum of Pakistan, Karachi | 1990 | Sindh |
| 21 | Museum at Quaid-I-Azam Birth Place Karachi (Flag Staff House Museum) | 1950 | |
| 22 | Archaeological Museum, Moenjodaro Distt. Larkana | 1953 | |
| 23 | Archaeological Museum, Banbhore, Distt. Thatta. | 1967 | |
| 24 | Archaeological Museum, Omerkot, Distt: Tharparkar | 1967 | |
| 25 | Archaeological Museum, Hyderabad Fort, Hyderabad. | 1968 | |
| 26 | Moenjodaro Museum-Moenjodaro. | - | |
| 27 | University Museum-Hyderabad | - | |

## Famous & Historical Sites in Pakistan

Following is a list of prominent archaeological sites in Pakistan:

- Takht-i-Bahi & Sahr-i-Bahlol: Takht-i-Bahi is the site of an ancient Buddhist monastery in Mardan, Khyber-Pakhtunkhwa, Pakistan. The site is considered among the most important relics of Buddhism in all of Gandhara.
- The Shahbazgarhi rock edicts: These are fourteen edicts of the Mauryan emperor, Asoka (r. c. 272-235 BC) recorded on stone. The edicts are located beside one of the ancient trade routes connecting the Vale of Peshawar.
- Mehrgarh: The civilization in Mehrgarh was amongst the first in the world to establish agriculture. It is located approximately 30 kilometres from Sibi, Balochistan. The remains are dated to 7000-9000 years ago.
- Kot Djji: Located about 22 km south of Khairpur in the Sindh of province, Pakistan, the Kot Dijli site is some 60 km away from Mohenjo-daro. It was excavated in 1955.
- Mohenjodaro: The name literally translates to Mound of the Death. It is situated 350 miles from Karachi, and is one of the most important archaeological sites in Pakistan. It was one of the largest settlements of the ancient Indus Valley Civilization, and one of the world's earliest major urban settlements. The civilization existed from 2500 B.C. to about 1500 B.C. It was declared a UNESCO World Heritage Site in 1980.
- Harrappa: Harappa is situated 35 km from Sahiwal and around 250 km from Lahore. It was here that the remains of the Indus Valley Civilization were first discovered. Harappa looks to have been populated around in 2000 to 1700 B.C.
- Taxila: Taxila is situated at a distance of about 32 km from Islamabad. The name is translated to "City of Cut Stone" in Sanskrit. The civilization here is dated back to the Persian Empire in the 6th century BC. It was declared a UNESCO World Heritage Site in 1980. Taxila can be considered to be amongst the earliest universities to ever exist.
- Rehman Dheri: It is a pre-Harappan site, and dated about 4000 B.C. It is located 22 km away from Dera Ismail Khan in the Khyber-Pakhtunkhwa Province.
- Makli Necropolis: It is one of the largest discovered funerary sites in the world. It is spread over 10 kms near the city of Thatta, Sindh.

| Sr. | Name of Gallery | City |
|---|---|---|
| 1 | Arts Council Gallery | Karachi |
| 2 | Ali Imam Gallery | |
| 3 | Koonj Gallery | |
| 4 | Al-Hamra Art Gallery | |
| 5 | Lahore Art Gallery | Lahore |
| 6 | Croweaters Gallery | |
| 7 | National Art Gallery | |
| 8 | Nomad Art Gallery | Islamabad |
| 9 | Rohtas Art Gallery | |

## Famous Landmarks of Pakistan:

| Name | Location | Completed in |
|---|---|---|
| Shalimar Gardens | Lahore | 1641 |
| Faisal Mosque | Islamabad | 1986 |
| Pakistan Monument | Islamabad | 2007 |
| Mazar-e-Quaid | Karachi | 1971 |
| Minar-e-Pakistan | Lahore (Greater Iqbal Park) | 1968 |
| Wazir Khan Mosque | Lahore | 1634 |
| Hiran Minar | Shekihupura | 1606 |
| Chowk Yadgar (Formerly, Hasting's Memorial) | Peshawar | 1883 |

### Some famous mosques of Pakistan and when they were built:

- Faisal Mosque, Islamabad (built: 1986)
- Wazir Khan Mosque, Lahore (built: 1634)
- Tooba Mosque, Karachi (built: 1969)
- Shah Jahan Mosque, Thatta (built: 1644-1647)
- Badshahi Mosque, Lahore (built: 1671)
- Mahabat Khan Mosque, Peshawar (built: 1630)
- Grand Jamia Mosque, Lahore (built: 2014)
- Moti Masjid, Lahore (built: 1635)
- Dai Anga Mosque, Lahore (built: 1635)

## Tombs of Sufis and Saints in Pakistan

| Shrine | Shrine |
|---|---|
| Abdullah Shah Ghazi | Karachi |
| Syed Abul Hassan Bin Usman Bin Ali Al-Hajweri | Lahore |
| Makhdoom Baha-ud-din Zakariya | Multan |
| Makhdoom Rukn-ud-din (Shah Rukn-e-Alam) | Multan |
| Bulleh Shah | Kasur |
| Makhdoom Burhan-ud-din | Chiniot |
| Fariduddin Ganjshakar | Pakpattan |
| Syed Muhammad Usman (Lal Shahbaz Qalandar) | Jamshoro District |
| Sultan Bahoo | Jhang |
| Bibi Pak Daman | Lahore |
| Meher Ali Shah, Golra Sharif | Islamabad |
| Sultan Sakhi Sarwar | Dera Ghazi Khan |
| Khwaja Ghulam Farid | Kot Mithan |
| Shah Abdul Latif Bhittai | Matiari |

## Miscellaneous:

- **The Minar-e-Pakistan** was designed by the Russian-born Pakistani architect and civil engineer, Nasreddin Murat Khan. The foundation stone was laid on 23 March 1960. Construction took eight years, and was completed on 21 October 1968 at an estimated cost of PKR 7,058,000.
- **The Shalimar Gardens** are a Mughal garden complex located in Lahore. Construction of the gardens began in 1641 and was completed in 1642. They were declared a UNESCO World Heritage Site in 1981.
- **The Gandhara Civilization:** In the 2nd century B.C., the land that is now known as Pakistan became the birthplace of what came to be known as the Gandhara Civilization. Buddhism was adopted as the state religion of this civilization which flourished and lasted for over 1000 years till the 10th century A.D. During this time period the cities of Taxila, Swat and Charsaddah (old Pushkalavati) became three important centres of culture, learning, and trade for the civilization. Hundreds of monasteries and stupas were built in towns such as Sirkap and Sirsukh both in Taxila. It was from these centres that a unique art of sculpture originated which is known as Gandhara Art. This form of art is displayed throughout the world, such as the "Fasting Buddha" now on display in Lahore Museum.
- **Ormuri** is a "threatened" language, spoken by the people known as the Burki community, which mainly resides in Kaniguram, South Waziristan in Pakistan, and some parts of Afghanistan as well. The language is considered threatened/endangered owing to the extremely small number of people who speak it. It is also known as Buraki, Ormui , Ormur, or Bargista
- **Four most famous tragic romance folktales:**
  - Sohni Mahiwal: The story of Sohni and Mahiwal was popularized in the Punjabi qissa (long poem) Sohni Mahiwal by Fazal Shah Sayyad, who also wrote poems on Heer Ranjha, Laila Majnu and others.
  - Sassi Punnun: It is a love story from Sindhi and Balochi folklore. The story also appears in Shah Jo Risalo of Shah Abdul Latif Bhitai.
  - Mirza Sahiba: It was written by Pilu of Dhun. It was reimagined and immortalized by the Punjabi Sufi poet Hafiz in the seventeenth century.
  - Heer Ranjha: Several poetic narrations of the story exist, the most famous of which is the one by Waris Shah, which was written in 1766. Some historians say that the story was the original work of Shah based on his personal life. Others say that Heer and Ranjha were real personalities who lived under the Lodhi dynasty in India and Waris Shah utilized these personalities for his novel from 1766. Shah himself is of the opinion that the story is ultimately about man's quest for God.

## National Institutions of Pakistan

### Judiciary:

The topmost court of Pakistan is the Supreme Court of Pakistan, followed by the Federal Shariat Court and High Courts respectively.

- There is one Supreme Court of Pakistan situated in Islamabad. The building of the Supreme Court of Pakistan was designed by a Japanese architect Kenzo Tange.
- There are a total of 17 Judges of the Supreme Court of Pakistan including the Chief Justice of Pakistan (CJP). CJP retires at the age of 65 years.
- There are 5 high courts in Pakistan. Each situated in the capital city of the province and one in Islamabad.
- The Federal Shariat Court of Pakistan was established in 1980 to review the legislation so that it shouldn't conflict with Islamic principles.
- The Jurisdiction of the Supreme Court and Peshawar High Court has been extended to previously known tribal areas (FATA).
- Abdul Rashid was the first Chief Justice of Pakistan.

- According to Article 175A, the Chief Justice of Pakistan and the Judges of the Supreme Court are appointed by the President.
- According to Article 177 of the Constitution of Pakistan, "a person shall not be appointed a Judge of the Supreme Court unless he is a citizen of Pakistan and— (a) has for a period of, or for periods aggregating, not less than five years been a judge of a High Court (including a High Court which existed in Pakistan at any time before the commencing day); or (b) has for a period of, or for periods aggregating, not less than fifteen years been an advocate of a High Court (including a High Court which existed in Pakistan at any time before the commencing day)."
- Judges Appointment & Court Composition: According to Article 176 of the Constitution, the number of Judges of the Supreme Court of Pakistan shall be determined by an Act of Parliament. A person with five years of experience as a Judge of High Court or 15 years of experience as advocate of High Court is eligible to be appointed as a Judge of the Supreme Court.
- Appointment to the Supreme Court: The Judicial Commission of Pakistan nominates candidates for the appointment as judge of Supreme Court. The recommendations of the Commission are then sent to the Parliamentary Committee. The Committee then confirms nominees and sends their names to the Prime Minister, who then forwards the same to the President for appointment.

## Facts (Legal System of Pakistan):

- The Qanun-e-Shahadat (Law of Evidence) Order 1984 was made law by President Zia-ul-Haq in 1984. It is an important legal document as it is the governing document for all laws related with evidence in the law courts of Pakistan.
- Article 8 clause (c) of the Punjab Family Courts (Amendment) Bill, 2015 deals with the dissolution of marriages through Khula. It states that "In a suit for dissolution of marriage, if reconciliation fails, the Family Court shall immediately pass a decree for dissolution of marriage and, in case of dissolution of marriage through khula, may direct the wife to surrender up to fifty percent of her deferred dower or up to twenty-five percent of her admitted prompt dower to the husband."
- The Judicial Commission of Pakistan consists of Chief Justice of Pakistan as Chairman, four senior-most judges of the Supreme Court, one former Chief Justice or judge of the Supreme Court nominated by the Chairman in consultation with four member judges for a period of two years, the Attorney General for Pakistan, the Federal Law Minister and a senior advocate of Supreme Court of Pakistan nominated by the Pakistan Bar Council.
- Supreme Judicial Council: The five-member Supreme Judicial Council (SJC) chaired by the Chief Justice of Pakistan is the only constitutional forum that has powers to remove judges of superior courts on different charges, but it has rarely taken such extreme action since its creation under Article 209.

## List of Chief Justices of Pakistan:

| Sr. | Name | Tenure |
|---|---|---|
| 1 | Mr. Justice Sir Abdul Rashid | 27.06.1949 – 29.06.1954 |
| 2 | Mr. Justice Muhammad Munir | 30.06.1954 - 02.05.1960 |
| 3 | Mr. Justice Muhammad Shahabuddin | 03.05.1960 - 12.05.1960 |
| 4 | Mr. Justice A.R. Cornelius | 13.05.1960 – 29.02.1968 |
| 5 | Mr. Justice S.A. Rahman | 01.03.1968 – 03.06.1968 |
| 6 | Mr. Justice Fazle Akbar | 04.06.1968 – 17.11.1968 |
| 7 | Mr. Justice Hamoodur Rahman | 18.11.1968 – 31.10.1975 |
| 8 | Mr. Justice Muhammad Yaqub Ali | 01.11.1975 – 22.09.1977 |
| 9 | Mr. Justice S. Anwarul Haq | 26.09.1977 – 25.03.1981 |
| 10 | Mr. Justice Muhammad Haleem | 25.03.1981 – 31.12.1989 |
| 11 | Mr. Justice Muhammad Afzal Zullah | 01.01.1990 – 18.04.1993 |
| 12 | Mr. Justice Dr. Nasim Hasan Shah | 17.04.1993 – 14.04.1994 |
| 13 | Mr. Justice Sajjad Ali Shah | 05.06.1994 – 02.12.1997 |
| 14 | Mr. Justice Ajmal Mian | 03.12.1997 – 30.06.1999 |
| 15 | Mr. Justice Saiduzzaman Siddiqui | 01.07.1999 – 26.01.2000 |
| 16 | Mr. Justice Irshad Hasan Khan | 26.01.2000 – 06.01.2002 |
| 17 | Mr. Justice Muhammad Bashir Jehangiri | 07.01.2002 – 31.01.2002 |
| 18 | Mr. Justice Sh. Riaz Ahmad | 01.02.2002 – 31.12.2003 |
| 19 | Mr. Justice Nazim Hussain Siddiqui | 31.12.2003 – 29.06.2005 |
| 20 | Mr. Justice Iftikhar Muhammad Chaudhry | 30.06.2005 – 11.12.2013 |
| 21 | Mr. Justice Tassaduq Hussain Jillani | 12.12.2013 – 05.07.2014 |
| 22 | Mr. Justice Nasir-ul-Mulk | 06.07.2014 – 16.08.2015 |
| 23 | Mr. Justice Jawwad S. Khawaja | 17.08.2015 – 09.09.2015 |
| 24 | Mr. Justice Anwar Zaheer Jamali | 10.09.2015 – 30.12.2016 |
| 25 | Mr. Justice Mian Saqib Nisar | 31.12.2016 – 17.01.2019 |
| 26 | Mr. Justice Asif Saeed Khosa | 18.01.2019 – 20.12.2019 |
| 27 | Mr. Justice Gulzar Ahmed | 21.12.2019 – 01-02-2022 – |
| 28 | Mr. Justice Umar Atta Bandiyal | 02-02-2022 – Present |

**The first five and the five most recent Chief Justices of the Federal Shariat Court:**

| Sr. # | Name | Tenure |
|---|---|---|
| 1 | Mr.Justice Salahuddin Ahmed | Date of assumption of Office:26-05-1980<br>Date of Relinquishment:25-05-1981 |
| 2 | Mr.Justice Shaikh Aftab Hussain (Late) | Date of assumption of Office: 01-06-1981<br>Date of Relinquishment: 14-10-1984 |
| 3 | Mr.Justice Sardar Fakhre Alam | Date of assumption of Office: 14-10-1984<br>Date of Relinquishment: 07-11-1984 |
| 4 | Mr.Justice Gul Muhammad Khan (Late) | Date of assumption of Office:08-11-1984<br>Date of Relinquishment:08-11-1990 |
| 5 | Mr.Justice Tanzil-ur-Rehman | Date of assumption of Office:17-11-1990<br>Date of Relinquishment:16-11-1992 |

| Sr. | Name | Tenure |
|---|---|---|
| 1 | Mr. Justice Sardar Muhammad Raza | Date of assumption of Office:05-06.2014<br>Date of Relinquishment:06-12-2014 |
| 2 | Mr. Justice Dr.Fida Muhammad Khan | Date of assumption of Office:12.12.2014<br>Date of Relinquishment:06.03.2015 |
| 3 | Mr. Justice Riaz Ahmad Khan | Date of assumption of Office:07-03-2015<br>Date of Relinquishment:14-05-2017 |
| 4 | Mr. Justice Sheikh Najam ul Hasan | Date of assumption of Office:15-05-2017<br>Date of Relinquishment:14-05-2019 |
| 5 | Mr. Justice Muhammad Noor Meskanzai | Date of Assumption of Office : 15.05.2019 to 30-05-2023 |
| 6 | Justice Iqbal Hameed-ur-Rehman | 01-06-2023 Present |

## The High Courts of Pakistan:

- **Sindh High Court:** The High Court of Sindh is the highest judicial institution in the province of Sindh. Established in 1906, the Court is situated in the provincial capital at Karachi. The Sindh Courts Act (Bom. VII of 1926) was passed on the 21st of August 1946, leading to the establishment of a 'Chief Court' for Sindh. In addition to being the highest Court of Appeal for criminal and civil matters in the province of Sindh, the Court also served as Court of Session and the District Court in Karachi. The principal seat of the High Court of Sindh is at Karachi, with Benches located at Sukkur and, Circuit Court at Larkana and Hyderabad.
- **Lahore High Court:** Established on the 21st of March 1919, the Lahore High Court serves as the highest judicial authority in the province of Punjab. The jurisdiction of the Lahore High Court are based on the Article 175(2) of the Constitution of 1973. The court is based in the provincial capital city of Lahore, and has branches in three other Pakistani cities-namely, Bahawalpur, Rawalpindi, and Multan.
- **Balochistan High Court:** As compared to the High Court authorities in the other provinces, the Balochistan High Court is a comparatively newer High Court. Justice was administered by a an authority known as the Judicial Commissioner in West Pakistan, prior to the establishment of the High Court of West Pakistan on the 14th of October, 1955. This authority was dissolved on the 1st of July of the year 1970, when a joint High Court was established for the provinces of Balochistan and Sindh. This joint High Court remained in service for the two provinces until the 30th of November 1976, after which separate high courts were established for both the provinces. The High Court of Balochistan was established on the 1st of December 1976. The principal seat is at Quetta, and two benches are located in Turbat and in Sibi.
- **Peshawar High Court:** The highest judicial authority in the province of Khyber Pakhtunkhwa is the Peshawar High Court, located in the provincial capital of KPK, Peshawar. After the dissolution of the One Unit system in July of 1970, four provinces were created and a High Court was to form for each of these provinces. The President at the time issued a separate Order for the establishment of High Courts. Based on this presidential order, the High Court for the then-N.W.F.P had to be called the Peshawar High Court, with its principal seat at Peshawar. In accordance with the 1973 Constitution, the Court has two Benches, one at Abbottabad and the other at DI Khan. A Parliamentary bill was passed in 2018, which extended the jurisdiction of the Supreme Court (SC) and the Peshawar High Court to the former Federally Administered Tribal Areas (FATA).
- **Islamabad High Court:** The Islamabad High Court for the capital territory of Islamabad was established as per the Islamabad High Court Act 2010 (Act No. XVII of 2010). The purpose of this Act was the establishment of an independent High Court for Islamabad Capital Territory (ICT) having original, appellate and other jurisdiction, as under the Constitution or other laws and also brought all Civil, Criminal, Revenue, Special Courts & all Tribunals which were exercising jurisdiction and functions in the ICT immediately before the commencement of the Act under the superintendence and control of the Lahore High Court under the supervision and control of the Islamabad High Court.

# Military

## List of Commanders-in-Chief of the Pakistan Army:

| Sr. # | Name of C-in-C | Took Office | Left Office |
|---|---|---|---|
| 1. | General Sir Frank Walter Messervy | August 1947 | February 1948 |
| 2. | General Sir Douglas David Gracey | February 1948 | April 1951 |

| | | | |
|---|---|---|---|
| 3. | Field Marshal Muhammad Ayub Khan | 17 January 1951 | 26 October 1958 |
| 4. | General Muhammad Musa Khan | 27 October 1958 | 17 September 1966 |
| 5. | General Yahya Khan | 18 September 1966 | 20 December 1971 |
| 6. | Lieutenant General Gul Hassan Khan | 20 December 1971 (Acting) 22 January 1972 | 21 January 1972 (Acting) 2 March 1972 |

## List of Chiefs of Army Staff of the Pakistan Army:

| Sr. # | Name | Assumed Office | Left Office |
|---|---|---|---|
| 1. | General Tikka Khan | 3 March 1972 | 1 March 1976 |
| 2. | General Muhammad Zia-ul-Haq | 1 March 1976 | 17 August 1988 |
| 3. | General Mirza Aslam Beg | 17 August 1988 | 16 August 1991 |
| 4. | General Asif Nawaz Janjua | 16 August 1991 | 8 January 1993 |
| 5. | General Abdul Waheed Kakar | 12 January 1993 | 12 January 1996 |
| 6. | General Jehangir Karamat | 12 January 1996 | 7 October 1998 |
| 7. | General Pervez Musharraf | 7 October 1998 | 29 November 2007 |
| 8. | General Ashfaq Pervez Kayani | 29 November 2007 | 29 November 2013 |
| 9. | General Raheel Shareef | 29 November 2013 | 29 November 2016 |
| 10. | General Qamar Javed Bajwa | 29 November 2016 | 29 November 2022 |
| 11 | General Asim Munir | 29 November 2022 | |

## List of Commanders-in-Chief of the Pakistan Air Force:

| Sr. # | Name | Assumed Office | Left Office |
|---|---|---|---|
| 1 | Air Vice Marshal Allan Perry-Keene | 15 August 1947 | 17 February 1949 |
| 2 | Air Vice Marshal Richard Atcherley | 18 February 1949 | 6 May 1951 |
| 3 | Air Vice Marshal Leslie William Cannon | 7 May 1951 | 19 June 1955 |
| 4 | Air Vice Marshal Arthur McDonald | 20 June 1955 | 22 July 1957 |
| 5 | Air Marshal Asghar Khan | 23 July 1957 | 22 July 1965 |
| 6 | Air Marshal Nur Khan | 23 July 1965 | 31 August 1969 |
| 7 | Air Marshal Abdur Rahim Khan | 1 September 1969 | 2 March 1972 |

## List of Chiefs of Air Staff of the Pakistan Air Force:

| Sr. # | Name | Assumed Office | Left Office |
|---|---|---|---|
| 1 | Air Marshal Zafar Chaudhry | 8 March 1972 | 15 April 1974 |
| 2 | Air Chief Marshal Zulfiqar Ali Khan | 16 April 1974 | 22 July 1978 |
| 3 | Air Chief Marshal Anwar Shamim | 23 July 1978 | 5 March 1985 |
| 4 | Air Chief Marshal Jamal Khan | 6 March 1985 | 8 March 1988 |
| 5 | Air Chief Marshal Hakeemullah Khan Durrani | 9 March 1988 | 9March 1991 |
| 6 | Air Chief Marshal Farooq Feroz Khan | 9 March 1991 | 8 November 1994 |
| 7 | Air Chief Marshal Abbas Khattak | 8 November 1994 | 7 November 1997 |
| 8 | Air Chief Marshal Pervaiz Mehdi Qureshi | 7 November 1997 | 20 November 2000 |
| 9 | Air Chief Marshal Mushaf Ali Mir | 20 November 2000 | 20 February 2003 |
| 10 | Air Chief Marshal Kaleem Saadat | 18 March 2003 | 18 March 2006 |
| 11 | Air Chief Marshal Tanvir Mahmood Ahmed | 18 March 2006 | 18 March 2009 |
| 12 | Air Chief Marshal Rao Qamar Suleman | 18 March 2009 | 19 March 2012 |
| 13 | Air Chief Marshal Tahir Rafique Butt | 19 March 2012 | 18 March 2015 |
| 14 | Air Chief Marshal Sohail Aman | 19 March 2015 | 19 March 2018 |
| 15 | Air Chief Marshal Mujahid Anwar Khan | 19 March 2018 | 19 March 2021 |
| 16 | Air Chief Marshal Zaheer Ahmad Babar Sidhu | 19 March 2021 | Incumbent |

## List of Naval Commanders-in-Chief of Pakistan:

| Sr. # | Naval Commander-in-Chief | Took office | Left office |
|---|---|---|---|
| 1 | Rear admiral James Wilfred Jefford | 15 August 1947 | January 1953 |
| 2 | Vice admiral Haji Mohammad Siddiq Choudri | January 1953 | February 1959 |
| 3 | Vice admiral Afzal Rahman Khan | March 1959 | October 1966 |
| 4 | Vice admiral Syed Mohammad Ahsan | October 1966 | August 1969 |

| | | | |
|---|---|---|---|
| 5 | Vice admiral Muzaffar Hassan | September 1969 | December 1971 |

## List of Chiefs of Naval Staff of the Pakistan Navy:

| Sr. # | Name | Assumed Office | Left Office |
|---|---|---|---|
| 1 | Vice Admiral Hasan Hafeez Ahmed | March 1972 | March 1975 |
| 2 | Admiral Mohammad Shariff | March 1975 | March 1979 |
| 3 | Admiral Karamat Rahman Niazi | March 1979 | March 1983 |
| 4 | Admiral Tariq Kamal Khan | March 1983 | April 1986 |
| 5 | Admiral Iftikhar Ahmed Sirohey | April 1986 | November 1988 |
| 6 | Admiral Yastur-ul-Haq Malik | November 1988 | November 1991 |
| 7 | Admiral Saeed Mohammad Khan | November 1991 | November 1994 |
| 8 | Admiral Mansurul Haq | November 1994 | May 1997 |
| 9 | Admiral Fasih Bokhari | May 1997 | October 1999 |
| 10 | Admiral Abdul Aziz Mirza | October 1999 | October 2002 |
| 11 | Admiral Shahid Karimullah | 3 October 2002 | 6 October 2005 |
| 12 | Admiral Afzal Tahir | 7 October 2005 | 7 October 2008 |
| 13 | Admiral Noman Bashir | 7 October 2008 | 7 October 2011 |
| 14 | Admiral Asif Sandila | 7 October 2011 | 7 October 2014 |
| 15 | Admiral Muhammad Zakaullah | 7 October 2014 | 7 October 2017 |
| 16 | Admiral Zafar Mahmood Abbasi | 7 October 2017 | 7 October 2020 |
| 17 | Admiral Muhammad Amjad Khan Niazi | 7 October 2020 | Incumbent |

## List of Chairmen Joint Chiefs of Staff Committee from throughout Pakistan's history (from first to most recent in descending order):

| Sr. # | Name |
|---|---|
| 1 | General Muhammad Shariff |
| 2 | Admiral Mohammad Sharif |
| 3 | General Iqbal Khan |
| 4 | General Rahimuddin Khan |
| 5 | General Akhtar Abdur Rahman |
| 6 | Admiral Iftikhar Ahmed Sirohey |
| 7 | General Shamim Allam |
| 8 | Air Chief Marshal Feroz Khan |
| 9 | General Jehangir Karamat |
| 10 | General Pervez Musharraf |
| 11 | General Aziz Khan |
| 12 | General Ehsan ul Haq |
| 13 | General Tariq Majid |
| 14 | General Khalid Shameem Wynne |
| - | General Ashfaq Parvez Kayani (Acting) |
| 15 | General Rashad Mahmood |
| 16 | General Zubair Hayat |
| 17 | General Nadeem Raza |
| 18 | General Sahir Shamshad |

## Rank Structure of the Pakistan Military forces (in descending order of seniority):

| Sr. # | Army | Air Force | Navy |
|---|---|---|---|
| 1 | General | Air Chief Marshal | Admiral |
| 2 | Lieutenant General | Air Marshal | Vice Admiral |
| 3 | Major General | Air Vice Marshal | Rear Admiral |
| 4 | Brigadier | Air Commodore | Commodore |
| 5 | Colonel | Group Captain | Captain |
| 6 | Lieutenant Colonel | Wing Commander | Commander |
| 7 | Major | Squadron Leader | Lieutenant Commander |
| 8 | Captain | Flight Lieutenant | Lieutenant |
| 9 | Lieutenant | Flying Officer | Sub-Lieutenant |
| 10 | 2nd Lieutenant | Pilot Officer | Midshipman |

## Headquarters of the Pakistan Military forces:

- **General Headquarters (GHQ), Pakistan Army:** The General Headquarters (GHQ), located in the city of Rawalpindi, serves as the headquarters of the Pakistan Army. Established immediately after Pakistan's independence in August of 1947, it was based in what previously served as the HQ of the British Army's Northern Command. It was announced in December of 2017 that the Pakistan Army shall be shifting its GHQ from Rawalpindi to Islamabad.
- **Air Headquarters (AHQ), Pakistan Air Force:** Air Headquarters (AHQ), located in the capital Islamabad, is the Headquarters of the Pakistan Air Force. Initially it was established at Peshawar in August 1947. In 2005, it was moved to Islamabad.
- **Naval Headquarters (NHQ), Pakistan Navy:** Naval Headquarters (NHQ) is the headquarters of Pakistan Navy established in 1947 in Karachi. In 1975, it was moved to Islamabad.

- **Joint Staff Headquarters (JS HQ):** The Joint Staff Headquarters, situated next to the General Headquarters of the Pakistan Army, serves as the headquarters of the Joint Chiefs of Staff Committee which was established in 1972.

## Training Academies of the Pakistan Military forces:

- **Pakistan Military Academy (PMA), Kakul:** Pakistan Military Academy (PMA, Kakul) is the main training academy for Officers of the Pakistan Army. It is located in the village of Kakul, near the the city of Abbottabad in the Khyber Pakhtunkhwa province. Established in October of the year 1947, a few months after Pakistan's independence, it is the only training academy for producing Officer for service in the Pakistan Army. The academy's two year educational training program is accredited with National University of Science & Technology (NUST). After the completion of the program, the cadets are assigned for service in the Army's numerous Corps. The academy consists of four battalions and 16 companies. Many cadets from the ally countries of Pakistan also receive training at PMA Kakul.
- **Pakistan Air Force Academy, Risalpur:** The Pakistan Air Force (PAF) Academy is situated in the small town of Risalpur, near the city of Mardan, in the Khyber Pakhtunkhwa province of Pakistan. The primary purpose of the academy is to train General Duty Pilots and Avionics engineers, as well as ground support staff, for the PAF. There are two institutions in the Academy; College of Flying Training (CFT), and the College of Aeronautical Engineering (CAE). The PAF Academy's history can be traced back to the year 1910, when, in the area where the academy is now located, a cantonment was established. At this military outpost in Risalpur, the Royal Flying Corps were set up during the events of World War I. This later became a training school by the name of RPAF Flying Training School on the 15th of September, 1947. The famed PAF Officer, Wing Commander Asghar Khan became the first Officer Commanding of the School. The first General Duty Pilot course, 'GD (P)', graduated on the 2nd of January 1948. The school was then elevated to the status of College of Flying training (CFT) in April of 1948 by Quaid-i-Azam. The college was then finally upgraded to the status of PAF Academy in January 1967 by the then President of Pakistan, Ayub Khan.
- **Pakistan Naval Academy, aka Pakistan Naval Ship Rahbar (PNS Rahbar):** The Pakistan Naval Academy is the primary academy for training of officers to be appointed in the service of the Pakistan Navy. It is located in the island of Manora, in the province of Sindh. It was established in the December of 1970. From its inception till now, a total of about 1,912 officers from Pakistan's allied countries such as Iran, Saudi Arabia, UAE, Ghana, Libya, Lebanon etc. have been trained at the academy. It is the very first academy of the Armed Forces in Pakistan to be ISO 9001: 2000 certified. In 1965, the Academy was given the status of a degree awarding institution. Officers in the Bachelor of Engineering (BE) programs are awarded degrees by NUST, while those in the Logistics Branch get awarded with BBA (Hons) degrees from IBA.

## The Kulbhushan Jadhav Case

On 3rd March 2016, Kulbhushan Jadhav was arrested in a counterintelligence operation in Mashkel, Balochistan. Jadhav was a Research and Analysis Wing (RAW) agent operating under the false identity of Hossein Mubarak Patel. He was involved in anti-Pakistan sabotage and espionage activities. The Inter-Services Public Relations released a confessional statement on March 25th in which Jadhav claimed to be a serving Indian Navy officer. Jadhav was court-martialed and sentenced to death by a military tribunal on the 10th of April, 2017, for espionage against Pakistan. He was tried under Section 59 of the Pakistan Army Act, 1952, which states that:

"Civil offences. –

(1) Subject to the provisions of subsection (2), any person subject to this Act who at any place in or beyond Pakistan commits any civil offence shall be deemed to be guilty of an offence against this Act and, if charged therewith under this section, shall be liable to be [dealt with under this Act], and, on conviction, to be punished as follows, that is to say,---

(a) if the offence is one which would be punishable under any law in force in Pakistan with death or with [imprisonment for life], he shall be liable to suffer any punishment assigned for the offence by the aforesaid law or such less punishment as is in this Act mentioned; and

(b) in any other case, he shall be liable to suffer any punishment assigned for the offence by the law in force in Pakistan, or rigorous imprisonment for a term which may extend to five years or such less punishment as is in this Act mentioned [:]

[Provided that, where the offence of which any such person is found guilty is an offence liable to hadd under any Islamic law, the sentence awarded to him shall be that provided for the offence in that law.

(2) A person subject to this Act who commits an offence of murder against a person not subject to this Act [or the Pakistan Air Force Act, 1953 (VI of 1953)], or to the [Pakistan Navy Ordinance, 1961 (XXXV of 1961)], or of culpable homicide not amounting to murder against such a person or of [Zina or Zina-bil-Jabr] in relation to such a person, shall not be deemed to be guilty of an offence against this Act and shall not be [dealt with under this Act] unless he commits any of the said offences,---

(a) While on active service, or

(b) at any place outside Pakistan, or

(c) at a frontier post specified by the Central Government by notification in this behalf.

(3) The powers of a Court martial 2[or an officer exercising authority under section 23] to charge and punish any person under this section shall not be affected by reason of the fact that the civil offence with which such person is charged is also an offence against this Act.

[(4) Notwithstanding anything contained in this Act or in any other law for the time being in force a person who becomes subject to this Act by reason of his being accused of an offence mentioned in clause (d) of sub-section (1) of section 2 shall be liable to be tried or otherwise dealt with under this Act for such offence as if the offence were an offence against this Act and were committed at a time when such person was subject to this

Act, and the provisions of this section shall have effect accordingly]."

## List of Military Awards in Pakistan:

| Military Awards | Ranking |
|---|---|
| Nishan e Haider | 1 |
| Hilal e Jurat | 2 |
| Sitara i Jurat | 3 |
| Tamgha i Jurat | 4 |

## Recipients of Nishan-e-Haider (or its equivalent Hilal-e-Kashmir):

| Sr. | Name | Regiment | Battle | Date of Martyrdom |
|---|---|---|---|---|
| 1 | Naik Saif Ali Janjua (Hilal-e-Kashmir) | 18 Azad Kashmir Regiment, Pakistan Army | Indo-Pakistani War of 1947 | 26 October 1948 |
| 2 | Captain Raja Muhammad Sarwar | 2/1 Punjab Regiment, Pakistan Army | Indo-Pakistani War of 1947-48 | 27 July 1948 |
| 3 | Major Tufail Mohammad | 16th Punjab Regiment Border Guards East Pakistan Rifles, Pakistan Army | Indo-Pak Border skirmish 1958 | 7 August 1958 |
| 4 | Major Raja Aziz Bhatti | 17 Punjab Regiment, Pakistan Army | Indo-Pakistani War of 1965 | 10 September 1965 |
| 5 | Pilot Officer Rashid Minhas | No. 2 Fighter Conversion Unit, Pakistan Air Force | Indo-Pakistani War of 1971 | 20 August 1971 |
| 6 | Major Muhammad Akram | 4 Frontier Force Regiment, Pakistan Army | Indo-Pakistani War of 1971 | 5 December 1971 |
| 7 | Major Shabbir Sharif | 6 Frontier Force Regiment, Pakistan Army | Indo-Pakistani War of 1971 | 6 December 1971 |
| 8 | Sawar Muhammad Hussain Janjua | 20 Lancers (Armoured Corps), Pakistan Army | Indo-Pakistani War of 1971 | 10 December 1971 |
| 9 | Lance Naik Muhammad Mahfuz | 15 Punjab Regiment, Pakistan Army | Indo-Pakistani War of 1971 | 17 December 1971 |
| 10 | Captain Karnal Sher Khan | 27 Sindh Regiment/12 Northern Light Infantry, Pakistan Army | Kargil War | 5 July 1999 |
| 11 | Havaldar Lalak Jan | 12 Northern Light Infantry, Pakistan Army | Kargil War | 7 July 1999 |

## Operations conducted by the Pakistan Army on UN missions

**Congo (August 1960 to May 1964)**
**Under**

- Operation of the United Nations in Congo

**West New Guinea (October 1962 - April 1963)**
**Under:**

- United Nations Security Force in New Guinea (UNSFING)

**Namibia (April 1989 to March 1990)**
**Under:**

- United Nations Transition Assistance Group in Namibia (UNTAGIN)

**Kuwait (December 1991 to October 1993)**
**Under:**

- United Nations Iraq-Kuwait Observation Mission (UNIKOM)

**Haiti (1993 to 1996)**
**Under:**

- United Nations Mission in Haiti (UNMIH)

**Cambodia (March 1992 to November 1993)**
**Under:**

- United Nations Transitional Authority in Cambodia (UNTAC)

**Bosnia (March 1992 to February 1996)**
**Under:**

- United Nations Protection Forces in Bosnia (UNPROFOR)

**Somalia (March 1992 to February 1996)**
**Under:**

- United Nations Operation in Somalia-I (UNOSOM-I)

**Rwanda (October 1993 – March 1996)**
**Under:**

- United Nations assistance mission for Rwanda (UNAMIR).

Angola (February 1995 to June 1997)

**Under:**

- União Nacional para a Independência Total de Angola (UNITA)

**Eastern Slavonia (May 1996 – August 1997)**
**Under:**

- United Nations Transitional Authority in Eastern Slavonia (UNTAES).

**Sierra Leone (October 1999 to December 2005)**

Under:

- United Nations mission in Sierra Leone (UNAMSIL)

## Current Deployment

| Start of operation | Name of Operation | Conflict |
|---|---|---|
| 1999 | United Nations Organization Mission in the Democratic Republic of the Congo (MONUC) | Second Congo War |
| 2003 | United Nations Mission in Liberia (UNMIL) | Second Liberian Civil War |
| 2004 | United Nations Operation in Burundi ONUB | Burundi Civil War |
| 2004 | United Nations Operation in Côte d'Ivoire (UNOCI) | Civil war in Côte d'Ivoire |
| 2005 | United Nations Mission in Sudan (UNMIS) Staff/Observers | Second Sudanese Civil War |

## List of Pakistani missiles with their ranges:

| Missile | Range |
|---|---|
| Ababeel | 2,200 km |
| Shaheen 3 | 2,750 km |
| Hatf 9 "Nasr" | 60 km |
| Hatf 8 "Ra'ad" | 350 km |
| Hatf 7 "Babur" | 350-700 km |
| Hatf 6 "Shaheen 2" | 1,500-2,000 km |
| Hatf 5 "Ghauri" | 1,250-1,500 km |
| Hatf 4 "Shaheen 1" | 750 km |
| Hatf 3 "Ghaznavi" | 290 km |
| Hatf 2 "Abdali" | 180-200 km |
| Hatf 1 | 70-100 km |

### Information regarding the JF-17 Thunder Fighter Jet:

- JF-17 Thunder is a single-engine, lightweight, multipurpose combat aircraft that was developed jointly by Chengdu Aircraft Industry Corporation (CAC) of China and Pakistan Aeronautical Complex (PAC) of Pakistan.
- JF-17's maiden flight was completed in August 2003 and entered service in March 2007.
- Pakistan Aeronautical Complex (PAC) holds the exclusive rights of 58% of JF-17 airframe co-production work.
- Currently, there are 109 active JF-17 jets in the PAF.
- Other air forces which purchased and have active duty JF-17 fighter jets are the Nigerian Air Force and the Myanmar Air Force.
- As of December 2020, the Argentine Air Force has also expressed interested in purchasing the JF-17.
- Some specifications of the aircraft are as follows,

| Physical Parameters | |
|---|---|
| Length | 49 ft |
| Height | 15.5 ft |
| Wingspan | 31 ft |
| Empty Weight | 14,520 lb |
| **Performance Parameters** | |
| Maximum take-off weight | 27,300 lb |
| Maximum Mach no. | 1.6 |
| Maximum Speed | 700 Knots IAS |
| Service Ceiling | 55,500 ft |
| Thrust to weight ratio | 0.95 |
| Maximum engine thrust | 19,000 lbs |
| G limit | +8/-3 |
| Ferry Range | 1,880 NM |
| **Armament** | |
| No. of stations | 07 |
| Total load capacity | 3400 lbs |

## Names of important Military Operations in Pakistan:

| Anti-Terrorism Military Operations in Pakistan | Year |
|---|---|
| Operation Al-Mizan (FATA) | June 2002 |
| Operation Kalosha (Wana) | March 2004 |
| Operation Silence (Islamabad) | July 2007 |
| Operation Rah e Haq (Swat) | October/November 2007 |
| Operation Zalzala (South Waziristan) | Jan 2008 |
| Operation Sirat-e-Mustaqeem (Khyber Agency) | June 2008 |
| Operation Rah e Haq II (Swat) | July 2008 |
| Operation Sher Dil (Bajaur) | Sep 2008 |
| Operation Rah e Haq III (Swat) | January 2009 |
| Operation Rah e Rast (Swat) | May 2009 |
| Operation Rah e Nijat (South Waziristan) | October 2009 |
| Operation Koh e Sufaid (Kurram Agency) | July 2011 |
| Operation Zarb e Azab (Azab was also the name of the sword of the holy Prophet S.W.T) | June 2014- April 2016 |
| Operation Radd-ul-Fasaad | Feb 2017 - Present |

## Non-Operational Gallantry Awards:

| Award Name | Ranking |
|---|---|
| Sitara e Basalt | 1 |
| Tamgha e Basalt | 2 |
| Nishan e Imtiaz | 3 |
| Hilal i Imtiaz | 4 |
| Sitara I Imtiaz | 5 |
| Tamgha i Imtiaz | 6 |
| Tamgha i Khidmat (class I) | 7 |
| Tamgha i Khidmat (class II) | 8 |
| Tamgha i Khidmat (class III) | 9 |

- Dr. Abdul Qadeer Khan is the only Pakistani to be awarded twice with the honorary Nishan e Imtiaz (In 1996 and then on 14 August 1998). He was also awarded Hilal e Imtiaz in 1989.

# Miscellaneous

## Establishment of Numerous National Institutes

| Name of Institutes | Date of Establishment |
|---|---|
| Pakistan Army | August 14, 1947 |
| NAB | November 16, 1997 |
| FBR | July 1, 1920, as CBR |
| FIA | January 13, 1975 |
| PIA | October 29, 1946, as Orient Airways |
| State Bank of Pakistan | July 1, 1948 |
| ISI | January 1, 1948 |
| WAPDA | February 22, 1958 |
| PTV | November 26, 1964 |
| NTDC | 1998 |
| SNGPL | 1963 |
| PNSC | 1971 |
| PTCL | 1947 |
| NBP | 1949 |
| SSGC | 1955 |
| IRSA | 1992 |

## Major offices/Institutions and their terms in Pakistan:

| Office/Heads | Term |
|---|---|
| Election commissioner of Pakistan | 5 years |

## Full form of abbreviations used for Public Sector Organizations:

| | |
|---|---|
| PSO | Pakistan State Oil |
| PTV | Pakistan Television Corporation |
| OGRA | Oil and Gas Regulatory Authority |
| PTDC | Pakistan Tourism and Development Authority |
| PHA | Parks and Horticulture Authority |
| PHFMC | Punjab Health Facilities Management Company |
| PIA | Pakistan International Airlines |
| CDA | Capital Development Authority |
| BISP | Benazir Income Support Programme |
| PSDP | Public Sector Development Programme |
| SMEDA | Small and Medium Enterprises Development Authority |
| PSX | Pakistan Stock Exchange |
| SNGPL | Sui Northern Gas Pipeline Limited |
| NAB | National Accountability Bureau |
| FIA | Federal Investigation Agency |
| FBR | Federal Board of Revenue |
| NADRA | National Database and Registration Authority |
| ISI | Inter-Services Intelligence |
| IB | Intelligence Bureau |
| SBP | State Bank of Pakistan |
| AMC | Army Medical Corps |
| CAA | Civil Aviation Authority |
| LDA | Lahore Development Authority |
| CDA | Capital Development Authority |
| CMH | Combined Military Hospital |
| CPEC | China Pakistan Economic Corridor |
| NDMA | National Disaster Management Authority |
| PCB | Pakistan Cricket Board |
| WAPDA | Water and Power Development Authority |
| OGDCL | Oil and Gas Development Company Limited |
| SPARCO | Space and Upper Atmosphere Research Commission |
| WASA | Water and Sanitation Authority |
| CDA | Capital Development Authority |
| LWMC | Lahore Waste Management Company |
| PMA | Pakistan Military Academy |

## Facts about National Anthem, Symbols, Awards etc.

### Some National Symbols of Pakistan:

- National Sports: Field Hockey
- National Animal: Markhor
- National Bird: Peregrine Falcon
- National Tree: Cedrus Deodara
- National Flower: Jasmine
- National Fruit: Mango
- National Predator: Snow Leopard
- National Mammal: Indus River Dolphin
- National Reptile: Indus Crocodile
- National Drink: Sugarcane Juice
- National Poet: Allama Muhammad Iqbal

### The National Anthem of Pakistan:

- Official approval of the 'Qaumi Tarana' (national anthem) was announced by the Ministry of Information and Broadcasting in August 1954.
- It has three stanzas and each stanza has five lines.
- The tune is based on Eastern music.
- It utilizes 21 musical instruments and 38 tones.
- In December 1948, the National Anthem Committee was constituted under Sardar Abdul Rab Nishtar, Minister of Communications, to select the national anthem.
- It was written by famous poet Hafeez Jallundhri in 1952, which was selected from 723 competing songs and the prize money was PKR 10,000.
- On 21 August 1950, the Government of Pakistan adopted Ahmed G. Chagla's tune for the national anthem.
- It is written in the Persian language and it has only a single word "ka" in its national language Urdu.
- Singers were Ahmad Rushdi, Shamim Bano, Kokab Jehan, Rasheeda Begum, Najam Ara, Naseema Shaheen, Zwar Hussain, Akhtar Abbas, Ghulam Dastgir, Anwar Zaheer and Akhtar Wassi.
- The national anthem was first released on Radio Pakistan on August 13, 1954.
- The first colour film with the flag and anthem was produced on January 19, 1955 in the USA.

## Civil Awards

**The Pakistan Civil Awards consist of the following five orders:**

- The Order of Pakistan (Pakistan)
- The Order of Bravery (Shujaat)
- The Order of Excellence (Imtiaz)
- The Order of Great Leader (Quaid-i-Azam)
- The Order of Service (Khidmat)

| Award sets | Order of precedence |
|---|---|
| Nishaan | Nishan-e-Pakistan |
| | Nishan-e-Imtiaz |
| | Nishan-e-Quaid-i-Azam |
| | Nishan-e-Khidmat |
| Hilal | Hilal-e-Pakistan |
| | Hilal-e-Shujaat |
| | Hilal-e-Imtiaz |
| | Hilal-e-Quaid-i-Azam |
| | Hilal-e-Khidmat |
| Sitara | Sitara-e-Pakistan |
| | Sitara-e-Shujaat |
| | Sitara-e-Imtiaz |
| | Sitara-e-Quaid-i-Azam |
| | Sitara-e-Khidmat |
| Tamgha | Tamgha-e-Pakistan |
| | Tamgha-e-Pakistan |
| | Tamgha-e-Shujaat |
| | Tamgha-e-Imtiaz |
| | Tamgha-e-Quaid-i-Azam |
| | Tamgha-e-Khidmat |

## Important Celebrated Days in Pakistan

| | |
|---|---|
| 5th February | Kashmir Day |
| 23rd March | Pakistan Day. |
| 1st May | Labour Day |
| 28th May | Youm-e-Takbir |
| 14th August | Independence Day |
| 6th September | Defence Day/Youm-e-Difa |
| 7th September | Air Force day |
| 8th September | Navy Day/Youm-e-Bahria |
| 11th September | The death anniversary of our founder Quaid-e-Azam |
| 24th October | Azad Kashmir Day |
| 9th November | Iqbal Day |
| 25th December | The birth anniversary of our founder Quaid-e-Azam |

## Quick Facts:

- Sharifuddin Pirzada was the only Pakistani who has served as the Secretary General of the IOC. This is the highest office held by any Pakistani on an international level. Sharifuddin Pirzada was a Barrister in Pakistan who also served in the Supreme Court as a senior advocate.

# Education in Pakistan

## Famous Colleges/Universities in Pakistan and their date of establishment:

| College/University Name | Date of Establishment |
|---|---|
| Islamia College Peshawar | 1913 |
| Islamia College Cooper Road Lahore | 1939 |
| Islamia College Civil Lines Lahore | 1892 Source: Official Website |
| MAO College Lahore | 1933 |
| Government College Lahore | 1864 Source: Official Website |
| Murray College Sialkot | 1889 Source: Wikipedia |
| Gordon College Rawalpindi | 1893 |
| Kinnaird College Lahore | 1913 Source: Official Website |
| Forman Christian College | 1864 Source: Official Website |
| Lahore College for Women University | 1922 Source: Official Website |
| University of Punjab | 1882 Source: Official Website |
| King Edward Medical College | 1860 Source: Official Website |
| University of Veterinary & Animal Sciences (UVAS), Lahore | 1882 Source: Official Website |
| Institute of Business Administration (IBA), Karachi | 1955 Source: Official Website |
| Ghulam Ishaq Khan Institute of Engineering Sciences & Technology (GIKI), KPK | 1993 Source: Official Website |
| National University of Science & Technology (NUST), Islamabad/Rawalpindi | 1991 Source: Official Website |
| University of Karachi (UoK), Karachi | 1951 Source: Official Website |
| Lahore University of Management Sciences (LUMS), | 1984 Source: Official Website |

| | |
|---|---|
| Lahore<br>Quaid-i-Azam University, Islamabad | 1967 Source: Offical Website |

| | |
|---|---|
| 4th | 1981 |
| 5th | 1998 |
| 6th | 2017 |
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**Footnote:**

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The total area of Pakistan is 796,095 km2.

## Pakistan Provinces by Size:

| Province | Area |
|---|---|
| Balochistan | 347,190 km sq |
| Punjab | 205, 344 km sq |
| Sindh | 140, 914 km sq |
| KP | 101, 741 km sq |

## Pakistan Provinces by Population

**Note:** Pakistan is the world's fifth-most populous country with a population exceeding 212.2 million.it has the percentage of 2.8% of the total world's Population

| Sr. | Province |
|---|---|
| 1 | Punjab |
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| | |
|---|---|
| 1st | 1951 |
| 2nd | 1961 |
| 3rd | 1872 |

### Some facts from the 2023 Census:

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- According to the final approved results of the 7th Population and Housing Census, the total population of Islamabad is 2.36 million with a growth rate of 2.81%.
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| Lahore | |
| Quaid-I-Azam University, Islamabad | 1967 Source: Offical Website |

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## Districts of Pakistani Provinces

Following are lists of districts within each province of Pakistan, as well as the largest and smallest districts (by area).

### Punjab

**Total: 41**

- Largest: Bahawalpur
- Smallest: Lahore

**Bahawalpur Division**
Bahawalnagar District
Bahawalpur District
Rahim Yar Khan District

**Dera Ghazi Khan Division**
Dera Ghazi Khan District
Kot Addu District
Layyah District
Rajanpur District
Taunsa District
Muzaffargarh District

**Rawalpindi Division**
Attock District
Chakwal District
Jhelum District
Murree District
Rawalpindi District
Talagang District

**Gujranwala Division**
Gujranwala District
Narowal District
Sialkot District

**Faisalabad Division**
Chiniot District
Faisalabad District
Jhang District
Toba Tek Singh District

**Gujrat Division**
Gujrat District
Hafizabad District
Mandi Bahauddin District
Wazirabad District

**Lahore Division**
Lahore District
Nankana Sahib District
Kasur District
Sheikhupura District

**Multan Division**
Khanewal District
Lodhran District
Multan District
Vehari District

**Sargodha Division**
Bhakkar District
Khushab District
Mianwali District
Sargodha District

### Sindh

**Total: 30**

- Largest: Khairpur
- Smallest: Karachi Central

| | |
|---|---|
| • Badin | • Sanghar |
| • Dadu | • Shikarpur |
| • Ghotki | • Sukkur |
| • Hyderabad | • Tando Allahyar |
| • Jacobabad | • Tando Muhammad Khan |
| • Jamshoro | • Tharparkar |
| • Karachi Central | • Thatta |
| • Kashmore | • Umerkot |
| • Khairpur | • Sujawal |
| • Larkana | • Karachi East |
| • Matiari | • Karachi South |
| • Mirpur Khas | • Karachi West |
| • Naushahro Feroze | • Korangi |
| • Qambar Shahdadkot | • Keamari |
| • Shaheed Benazirabad | • Malir |

### Balochistan

**Total: 37**

- Largest: Chagai
- Smallest: Sohbatpur

| | | |
|---|---|---|
| • Awaran | • Kharan | • Panjgur |
| • Barkhan | • Kohlu | • Pishin |
| • Chagai | • Killa Abdullah | • Sherani |
| • Chaman | • Hub | • Sibi |
| • Dera Bugti | • Killa Saifullah | • Washuk |
| • Gwadar | • Lasbela | • Zhob |
| • Harnai | • Loralai | • Ziarat |
| • Jafarabad | • Mastung | • Sohbatpur |
| • Jhal Magsi | • Musakhel | • Quetta |
| • Kachhi | • Khuzdar | • Duki |
| • Kalat | • Nasirabad | • Hub |
| • Kech | • Nushki | • Surab |
| • Karezat | • Usta Muhammad | |

### Khyber Pakhtunkwa (KPK)

**Total: 36**

- Largest: Chitral
- Smallest: Torghar

| | |
|---|---|
| • Abbottabad District | • Malakand District |
| • Bajaur District | • Mansehra District |
| • Bannu District | • Mardan District |
| • Batagram District | • Mohmand District |
| • Buner District | • North Waziristan District |
| • Charsadda District | • Nowshera District |
| • Dera Ismail Khan District | • Orakzai District |
| • Hangu District | • Peshawar District |
| • Haripur District | • Shangla District |
| • Karak District | • South Waziristan (Upper) |
| • Khyber District | • Swabi District |
| • Kohat District | • Swat District |
| • Kolai-Palas District | • Tank District |
| • Kurram District | • Tor Ghar District |
| • Lakki Marwat District | • Upper Chitral District |
| • Lower Chitral District | • Upper Dir District |
| • Lower Dir District | • Upper Kohistan District |

| • Lower Kohistan District | • South Waziristan Lower |
|---|---|

**Some information regarding the former agencies (now districts) of the former FATA region (now part of KPK):**

| Sr. # | Name of Agency/District | Major Tribes | Administrative HQ/Capital |
|---|---|---|---|
| 1 | Khyber | Afridi, Shinwari | Landi Kotal |
| 2 | Kurram | Bangash, Turi | Parachinar |
| 3 | Bajaur | Tarkani, Utman Khel | Khar |
| 4 | Mohmand | Mohmand | Ghalanai |
| 5 | Orakzai | Daulatzai | Ghilijo Bazar (Upper Orakzai), Kalaya (Lower Orakzai) |
| 6 | North Waziristan | Dawar, Wazir | Miranshah |
| 7 | South Waziristan | Mehsud, Wazir | Wanna |

## Divisions of Provinces

A division in an administrative unit which is smaller than a province but bigger than a district (districts are further divided into tehsils and union councils). Each division has a number of districts.

| Province | Number of Divisions | Names of Divisions |
|---|---|---|
| Punjab | 10 | Gujrat, Bahawalpur, Dera Ghazi Khan, Faisalabad, Gujranwala, Lahore, Multan, Rawalpindi, Sahiwal, Sargodha |
| Khyber Pukhtunkhwa | 7 | Bannu, Dera Ismail Khan, Hazara, Kohat, Malakand, Mardan, Peshawar |
| Sindh | 7 | Banbhore, Hyderabad, Karachi, Sukkur, Larkana, Mirpur Khas, Shaheed Benazirabad |
| Baluchistan | 8 | Kalat, Makran, Naseerabad, Quetta, Sibi, Zhob, Rakhshan, Loralai |
| Gilgit-Baltistan | 3 | Gilgit, Baltistan, Diamer |
| AJ&K | 3 | Mirpur, Muzaffarabad, Poonch |

| Province | Number of Districts |
|---|---|
| Punjab | 41 |
| Khyber Pukhtunkhwa | 36 |
| Sindh | 30 |
| Baluchistan | 37 |
| Gilgit-Baltistan | 14 |
| AJ&K | 10 |
| ICT | 01 |
| **Total** | **169** |

## Some Valleys in Pakistan:

1. Hunza Valley in Gilgit
2. Bamburet Valley in Chitral
3. Kalash Valley in Chitral
4. Shounter Valley in Kel, AJ&K
5. Soon Valley in Khushab
6. Leepa Valley in AJK
7. Kaghan Valley in Mansehra
8. Kumrat Valley in Upper Dir

Quick Fact: The valley of Punial is situated in Ghizer District in the Gilgit-Baltistan, Pakistan, where thousands of tourists visit annually. "The place where Heaven and Earth meet" is a popular phrase used for this valley.

## Old names of cities of Pakistan:

| Old Name | New Name |
|---|---|
| Raj Shahi | Islamabad |
| Shalkot | Quetta |
| Mahmudpur | Lahore |
| Nerunkot | Hyderabad |
| Lyallpur | Faisalabad |
| Nawabshah | Benazirabad |
| Montgomery | Sahiwal |
| Fort Sandeman | Zhob |
| Khanpur | Gujranwala |
| Khangarh | Jacobabad |
| Salwankot | Sialkot |
| Campbellpur | Attock |
| Hindu Bagh | Muslim Bagh |
| Ajodhan | Pakpattan |
| Udayana/Suvastu | Swat |

## Temples in Pakistan

| Name | District |
|---|---|
| Katas Raj Temples | Chakwal |

## Pakistan's borders with its neighboring countries:

| Sr. # | Border | Length in kms |
|---|---|---|
| 1 | Pakistan-Afghan (Durand Line) | 2611.560 |
| 2 | Pakistan-China | 599.100 |
| 3 | LoC | 861.493 |
| 4 | Working Boundary | 202.000 |
| 5 | Pakistan-India | 2100.595 |
| 6 | Pakistan-Iran | 909.278 |

## Forts in Pakistan

| Name | Place | Time Period |
|---|---|---|
| Attock Fort | Attock | (1581-158)3 during Jalal ud Din Muhammad Akbar |

## Doabs of Pakistan:

**There are four doabs of Pakistan:**

1. Sindh Sagar Doab (between river Indus and Jehlum)
2. Chaj Doab (between river Chenab and Jhelum)
3. Rachna Doab (between river Ravi and Chenab)
4. Bari Doab (between river Beas and Ravi)

## Climate of Pakistan

Some information regarding the general climate of Pakistan:

- In much of Pakistan, the climate is tropical or subtropical, semi-arid or desert, but in the north there are also areas near the mountains which are quite rainy, a cold mountainous area, and a frigid area on the peaks of the Himalayas.
- In the cold half of the year, from late autumn to early spring, the north is reached by weather fronts of Mediterranean origin, which cause rainfall in the lowlands and snowfall in the mountains.
- In spring (i.e. March and April), the clash between air masses can cause thunderstorms and strong winds.
- In summer, from July to mid-September, the country is reached by an offshoot of the Indian monsoon. The warmest months are those that precede the monsoon, especially June.

**Climatic Zones of Pakistan:** Pakistan extends from 24° N to about 37° N. Its western border lies close to 62°E, its northeastern border extends to about 74oE, while Kashmir extends to 80° E. To the north of West Pakistan are the mountain ranges of the Pir Panjal, the Himalaya and the Karakoram Range. The Sulaiman Mountains are in the northwest, while Koh-i-Taftan and then lower ranges in continuation of the Namak-sar desert beyond them lie to the west, between Pakistan and Iran.

**Climatic divisions of Pakistan**

- **Highland Climate:** This region includes northern, north-western and western highlands. The winters are long, cold and snowy and the summers remain short and mild. In mountainous areas rainfall is normally associated with altitude.
- **Lowland Climate (Semi-arid to arid):** This region includes the whole of the Indus Plain except the coastal areas. Most of the Indus Plain lies at the western end of the tropical monsoon zone. It has arid and extreme climate with hot summers, cool winters and summer monsoon rainfall.
- **Coastal Climate:** The region includes the southern coastal strip comprising of the Indus Delta, Karachi and the whole of the Makran coast. The climate is dominated by sea breezes throughout the year. The maritime influence keeps the daily range of temperature low.
- **Arid Climate:** An arid climate is experienced in south-western Balochistan and the south-eastern desert. It is markedly dry and hot.

**Quick Fact:** Monsoon enters Pakistan from two different directions; first way is when the south-westerly winds arrive from the Bay of Bengal enter Pakistan after travelling through the Himalayas. Second pathway is when the southwest winds from Arabian Sea enter Pakistan.

**Quick Fact:** Pakistan lies in the temperate zone, immediately above the tropic of cancer.

## Some Major Passes of Pakistan:

| Name of Pass | Connect | Approx. Elevation |
|---|---|---|
| Dorah Pass | Afghan province Badakhshan with Chitral | 14,000 |
| Gomal Pass | D.I Khan with Afghanistan | 3,500 |
| Khojak Pass | Qila Abdullah with Chaman | 7,000 |
| Khunjerab Pass | Gilgit (Pakistan) with China | 15,500 |
| Khyber Pass | Peshawar with Kabul | 3,500 |
| Lowari Pass | Chitral with Dir | 10,000 |
| Malakand Pass | Peshawar with Citral | 4,000 |
| Shandur Top | Chitral with Gilgit | 12,000 |
| Babusar Pass | Gilgit with KPK | 13,500 |
| Bolan Pass | Sibi with Quetta | 5,500 |
| Mintaka Pass | Gilgit-Baltistan with China | 14,500 |

## Boundary lines connecting Pakistan

| Name | Border | Location |
|---|---|---|
| Working Boundary | between Indian held Kashmir and Pakistan | East |
| Pak-Afghan | Wakhan | North |

## Coast-area/ Continental Shelf of Pakistan

| | |
|---|---|
| Pakistan Coastal line | 1046 km (650 Miles) |
| Pakistan continental shelf | 350 nautical miles |

## Important Forts in Pakistan:

| Fort | City |
|---|---|
| Islam Garh Fort | Rahim Yar Khan District |
| Pacco Qillo | Hyderabad |
| Faiz Mahal | Khairpur, Sindh |
| Naukot Fort | Tharparkar |
| Ranikot Fort | Jamshoro District |
| Nandana Fort | Salt Range |
| Noor Mahal | Bahawalpur |
| Lahore Fort | Lahore |
| Derawar Fort | Bahawalpur |
| Rohtas Fort | Jhelum |
| Bala Hisar Fort | Peshawar |
| Baltit Fort | Hunza Valley |
| Ramkot Fort | Azad Kashmir |

## Quick Facts (Forts):

- Ranikot Fort, known as The Great Wall of Sindh, is a Talpur fort located near Sann, Jamshoro District, and Sindh. It is believed to be the world's largest fort.
- Rohtas Fort was built during the reign of Sher Shah Suri.

## Important Barrages & Headworks of Pakistan

| Name Barrage | River | District | Province |
|---|---|---|---|
| Jinnah Barrage | Indus | Mianwali | Punjab |
| Chashma Barrage | Indus | Mianwali | Punjab |
| Taunsa Barrage | Indus | D.G. Khan | Punjab |
| Guddu Barrage | Indus | Kashmoor | Sindh |
| Sukkur Barrage | Indus | Sukkur | Sindh |
| Ghulam Muhammad (Kotri) Barrage | Indus | Hyderabad | Sindh |
| Rasool Barrage | Jhelum | Mandi B. Din | Punjab |
| Marala Headworks | Chenab | Sialkot | Punjab |
| Trimmu Barrage | Chenab | Jhang | Punjab |
| Balloki Headworks | Ravi | Qasoor | Punjab |
| Sulemanki Headworks | Sutlej | Okara | Punjab |
| Islam Barrage | Sutlej | Vehari | Punjab |
| Panjnad Headworks | Sutlej | Muzaffargarh | Punjab |
| Khanki Headworks | Chenab | Gujranwala | Punjab |
| Munda Headworks | Swat | Swat | KPK |

**First Barrage of Pakistan:** Sukkur Barrage is the oldest barrage in the country, built during the British Raj from 1923 to 1932 and was named Lloyd Barrage.

## Rivers in Pakistan:

| Rivers | Length (km) |
|---|---|
| Indus | 3,180 |
| Satluj | 550 |
| Chenab | 960 |
| Jehlum | 774 |
| Ravi | 720 |
| Beas | 470 |

There are a total of 24 rivers in Pakistan:

- 8 in KPK
- 7 in Balochistan
- 5 in Punjab
- 4 in Sindh

## Pakistani River Lengths

- Indus – 3,180 km
- Sutlej – 550 km
- Chenab – 960 km
- Jehlum – 774 km
- Kabul – 700 km
- Hingol – 560 km
- Shyok – 550 km
- Kunar – 480 km

- Dasht – 430 km
- Zhob – 410 km

### Some Notes on the Rivers of Pakistan:

- **Indus:** The Indus River is the longest river in Pakistan. It is also the world's 21st largest river in terms of annual water flow. It has a total length of 3,180 kms. It is known as Pakistan's lifeline. Indus River originates from the Tibetan plateau. In other languages of the region, the river is known as Darya-i Sindh in Urdu, Sindhu in Sindhi, and Abāsin ("Father of Rivers") in Pashto.
- **Jhelum:** River Jhelum is approximately 774 kms long and is the tributary of Chenab. Jhelum originates from the south-eastern part of Kashmir valley and flows through Srinagar before entering Pakistan. Along its journey, near Muzaffarabad, it is joined by the largest tributary of the Neelum River.
- **Sutlej:** Sutlej, also called the Red River, flows through Punjab in northern India and Pakistan. It is around 550 kms long.
- **Chenab:** The Bhaga and Chandra rivers in the upper Himalayas join to form the Chenab River. It is nearly 960 kms long.
- **Ravi:** River Ravi originates in the Himalayas. It is approximately 720 kms long. It's also called 'The river of Lahore' since the city of Lahore is located at Ravi's eastern bank.

**Panjnad River** is a river in Bahawalpur. Panjnad River is formed by the merging of the five rivers of Punjab, namely Ravi, Beas, Sutlej, Jhelum, and Chenab.

## Lakes in Pakistan:

| Lake Name | Lake Location |
|---|---|
| Attabad Lake | Hunza Valley, Gilgit Baltistan |
| Ansoo Lake | Kaghan Valley |
| Baghsar Lake | Azad Kashmir |
| Borith Lake | Hunza Valley, Gilgit-Baltistan |
| Chitta Katha Lake | Shonter Valley, Azad Kashmir |
| Fairy Meadows Lake | Fairy Meadows, Nanga Parbat, Diameer |
| Haleji Lake | Thatta, Sindh |
| Hana Lake | Quetta, Balochistan |
| Kachura Lake | Skardu, Gilgit-Baltistan |
| Kalarkahar Lake | Kalar Kahar, Salt range, Punjab |
| Kalri Lake | Thatta, Sindh |
| Kanwal Lake | Islamabad |
| Karambar Lake | Ghizer, Gilgit-Baltistan |
| Khanpur Lake | Khanpur, Haripur |
| Keenjhar Lake | Thatta, Sind |
| Kundol Lake | Swat Valley |
| Kutwal Lake | Haramosh Valley, Gilgit Baltistan |
| Lulusar Lake | Kaghan Valley, Khyber Pakhtunkhwa |
| Manchar Lake | Jamshoro & Dadu Districts, Sindh |
| Mangla Lake | Mirpur District, Azad Kashmir |
| Mahodand Lake | Swat River, Swat Valley |
| Naltar lake | Naltar Valley |
| Phander Lake | Phander valley, Gilgit |
| Rama Lake | Rama Village, Astore |
| Ratti Gali Lake | Neelum Valley, Azad Kashmir |
| Rawal Lake | Islamabad |
| Rush Lake | Nagar Valley, Gilgit Baltistan |
| Saiful Malook Lake | Kaghan Valley |
| Satpara Lake | Skardu, Baltistan |
| Swaik Lake | Kalar Kahar, Chakwal District |
| Shandor Lake | Shandor Pass, Chitral |
| Sheosar Lake | Deosai, Gilgit Baltistan |
| Simbli Lake | Islamabad |
| Siri Lake | Shogran, Kaghan Valley |
| Subri Lake | Muzaffarabad, Azad Kashmir |

## Quick Facts (Lakes in Pakistan):

- Manchar Lake is the largest lake in Pakistan. It is a freshwater lake.
- Rush Lake is the highest lake in Pakistan and 25th highest lake in the World.
- Keenjhar Lake is the largest artificial Lake of Pakistan.
- Attabad Lake is the largest lake in Gilgit-Baltistan. It was created in 2010 after a landslide.

## Mountain Ranges in Pakistan

| Mountain Range | Location |
|---|---|
| Karakoram | Gilgit-Baltistan |
| Himalayas | Gilgit-Baltistan |
| Passu Cones | Karakoram Highway |
| Hindu Kush | Northern Pakistan |
| Hindu Raj | Northern Pakistan (eastern part of Hindu Kush) |
| Spin Ghar | West to Khyber Pass |
| Sulaiman Mountains | FATA |
| Spin Ghar Mountains | KPK |
| Salt Range | Punjab (Potohar Plateau) |
| Margalla Hills | ICT |
| Toba Kakar | Balochistan |
| Makran Range | Balochistan |
| Ras Koh Range | Balochistan |
| Chaghai Range | Balochistan |
| Kirthar Range | Sindh-Balochistan border |

## Highest Peaks in Pakistan (above 7500 meters)

| Mountain | Height | Range | District |
|---|---|---|---|
| Chogori/K-2 | 8,611 | Karakoram | Skardu |
| Nanga Parbat | 8,125 | Himalayas | Diamer |
| Gasherbrum No. I/Hidden Peak | 8,068 | Karakoram | Skardu |
| Falchan Kangri / Broad Peak | 8,047 | Karakoram | Skardu |
| Gasherbrum No. II | 8,035 | Karakoram | Skardu |
| Broad Peak Middle/Central | 8,016 | Karakoram | Skardu |
| Gasherbrum No. III | 7,952 | Karakoram | Skardu |
| Gasherbrum No.IV | 7,925 | Karakoram | Skardu |
| Distaghil Sar Main | 7,885 | Karakoram | Gilgit |
| Kunyang Chhish/Main | 7,852 | Karakoram | Gilgit |
| Masherbrum NE/ (K-1) | 7,821 | Karakoram | Gilgit |
| Masherbrum | 7,806 | Karakoram | Gilgit |
| Rakaposhi | 7,788 | Karakoram | Gilgit |
| Batura No. I | 7,785 | Karakoram | Gilgit |
| Batura II | 7,762 | Karakoram | Gilgit |
| Distaghil Sar No. II | 7,760 | Karakoram | Gilgit |
| Kanjut Sar No. I | 7,760 | Karakoram | Gilgit |
| Masherbrum W | 7,750 | Karakoram | Skardu |
| Saltoro Kangri No. I | 7,742 | Karakoram | Gaunche |
| Batura No. II | 7,730 | Karakoram | Gilgit |
| Batura III | 7,729 | Karakoram | Gilgit |
| Trivor / Peak No. 8 | 7,720 | Karakoram | Gilgit |
| Tirich Mir (Main) | 7,708 | Hindukush | Chitral |
| Saltoro Kangri II | 7,706 | Karakoram | Gaunche |
| Chhaltoro Gang R1 N | 7,705 | Karakoram | Gaunche |
| Distaghil Sar (E) | 7,700 | Karakoram | Gilgit |
| Tirich Mir (East) | 7,692 | Hindukush | Chitral |

## Facts about mountains:

- Rupal North & Rupal South are in Pakistan. They pass through Laila Peak and Nanga Parbat in the Hunza Valley
- The Himalayas are known as the youngest mountain range in the world. It's thought that this range formed about 40 million years ago.
- Tirich Mir separates Pakistan from Tajikistan and Afghanistan.
- Sakesar is the highest mountain in the Salt Range in Pothohar in Pakistan. Its height is 1,522m.
- The Karakoram Range is the most heavily glaciated area outside this planet's Polar Regions.

## Deserts in Pakistan

- Kharan Desert: The Kharan Desert is located in the Kharan district of Northwest Balochistan. It makes a natural boundary between Pakistan, Iran and Afghanistan. It is the sandiest desert in Pakistan. It arguably the most famous desert of Pakistan, as it was used for nuclear testing by the Pakistan military.
- Thal Desert: The Thal Desert is located in Bhakkar District of Punjab, between the rivers Jhelum and Indus. To its North, there are salt ranges, the Jhelum and Chenab Rivers to its East, and the Indus River to its West.
- Thar Desert: The Thar Desert is the world's 18th largest desert. It spreads into both Pakistan and India. In Pakistan, the desert extends over southeastern part of Punjab, and eastern part of Sindh. Towards the south of the desert is a salt marsh known as Rann of Kutch.
- Cholistan Desert: Cholistan Desert is locally known as "Rohi" and covers the area of Bahawalpur, Punjab. It adjoins the Thar Desert, extending over to Sindh and into India. Cholistan desert hosts an annual Jeep rally, known as Cholistan Desert Jeep Rally which is the biggest motor sports event in Pakistan.
- Cold (Katpana) Desert: The Cold Desert, aka Katpana Desert, is a high-altitude desert located near Skardu, in Gilgit-Baltistan. It is situated at an elevation of approximately 7,303 feet above sea level, and is one of the highest deserts in the world

## Glaciers of Pakistan

- Baltoro Glacier: At more than 60 kms in length, it is one of the longest in the world outside the Polar Regions, located in the Karakoram mountain range, Shigar district of Gilgit Baltistan.
- Batura Glacier: More than 55 kms in length, located in the Karakoram mountain range, Gojal region of Gilgit Baltistan.
- Biafo Glacier: More than 60 kms in length situated in the Karakoram mountain range in Shigar district, Gilgit Baltistan.
- Biarchedi Glacier: It is located on the northeast of Biarchedi Peak in Pakistan. It flows north into the Baltoro Glacier.
- Bilafond Glacier: It is located in Siachen region across Karakoram Range in Pakistan. It is a main source for Saltoro River.
- Siachen Glacier: It is a 75 kms long glacier located in the eastern Karakoram Range in the Himalayas, just northeast of the Line of Control between India and Pakistan.

## Some Information about Forests of Pakistan:

- **The Juniper Forests:** These are located near Ziarat, and are the second largest Juniper forests in the world. Some of the trees located in these forests are as old as 5000-7000. Besides the ones at Ziarat, another forest is located near Zargoon.
- **Manmade Forests:** Two famous man-made forests of Pakistan are the Changa Manga and Lal Sohanra Reserve Forests.

## National Parks in Pakistan

- Margalla Hills National Park: Islamabad
- Hazarganji Chiltan National Park: Balochistan
- Hingol National Park: Balochistan
- Kirthar National Park: Sindh
- Ayubia National Park: Khyber Pakhtunkhwa
- Chitral Gol National Park: Khyber Pakhtunkhwa
- Sheikh Badin National Park: Khyber Pakhtunkhwa
- Saiful Maluk National Park: Khyber Pakhtunkhwa
- Lulusar Dodipat National Park: Khyber Pakhtunkhwa
- Broghil Valley National Park: Khyber Pakhtunkhwa
- Khunjerab National Park: Gilgit-Baltistan
- Hunderab Shandur National Park: Gilgit-Baltistan
- Deosai National Park: Gilgit-Baltistan
- Central Karakoram National Park: Gilgit-Baltistan
- Qurumber National Park: Gilgit-Baltistan
- Machiara National Park: AJ & K
- Ghamot National Park: AJ & K
- Pir Lasura National Park: AJ & K
- Toli Pir National Park: AJ & K
- Musk Deer Gorez National Park: AJ & K
- Deva Vatala National Park: AJ & K
- Poonch River Mahseer National Park: AJ & K
- Lal Suhanra National Park: Punjab
- Chinji National Park: Punjab
- Kala Chitta National Park: Punjab
- Murree-Kotli Sattian-Kahuta National Park: Punjab

## Ports & Harbors of Pakistan

### Ports of Pakistan

- Karachi Port
- Port Qasim
- Gwadar Port
- Ormara
- Pansi
- Jiwani
- Keti Bandar

### Fish harbors

- Keti Bandar It is a fish harbor and a port, and there are two other fish harbors in Pakistan – Manora and Gwadar. This was also the place where Muhammad Bin Qasim arrived from Iraq. Keti Bandar is located in the Thatta District in Sindh.
- Manora It is located to the South of the Karachi port and there you can find different fish and oysters.
- Gwadar it is a fish harbor but also one of the three big seaports of Pakistan.

# Agriculture

## Karez:

Origin: People in the Mesopotamian times started using the karez to irrigate lands mainly in the Mediterranean and Egyptian area. The technology later reached the areas of Persia, Afghanistan, China via the Silk Route.

System: A Karez is basically an aqueduct that is used to get water from underground sources up to the ground where it is needed. It uses the force of gravity to pull water up via several vertical well-like structures that are all connected. These structures are made underground in a slopping area. This process does not require pumping.

Karez in Pakistan: Karez is the oldest system of irrigation of fields in Pakistan. In the current times it is only practiced in Balochistan.

## Crops

### Kharif Crops:

Kharif crops are monsoon crops. Their sowing begins in April and harvest occurs between October and December. Following are some of the kharif crops grown in the subcontinent:

| | | |
|---|---|---|
| Jowar | Black gram (urad) | Bitter gourd (kerala) |
| Maize | Cotton | Bottle gourd |
| Millet | Cowpea (chavala) | Brinjal |
| Rice | Green gram (moong) | Chili |
| Soybean | Groundnut | Lady fingers |
| Muskmelon | Guar | Sponge gourd |
| Sugarcane | Moth bean | Tinda |
| Watermelon | Mung bean | Tomato |
| Orange | Sesame (til) | Turmeric |
| Arhar (tur) | Urad bean | French bean |

### Rabi Crops:

Rabi crops are cropped and cultivated at the start of winter (October-December) and harvested towards the start of spring (April-May). Following are some of the kharif crops grown in the subcontinent:

| | | | | | | |
|---|---|---|---|---|---|---|
| barley | ber | mulberries | alfalfa | bean | garlic | Turnip |
| gram | date | orange | coriander | beetroot | lady finger | Tobacco |
| rapeseed | grape | chickpea | cumin | brinjal | lettuce | |
| mustard | grapefruit | kulthi | fenugreek | broccoli | pea | |
| oat | guava | lobias | linseed | cabbage | onion | |
| wheat | kinnow | masoor | mustard | capsicum | potato | |
| Bajra | lemon | mung. bean | isabgol | carrot | radish | |
| Linseed | lime | pigeon pea | sunflower | cauliflowers | spinach | |
| almond | mandari | toria | Bengal | chickpea | sweet | |

| | | | | | | |
|---|---|---|---|---|---|---|
| banana | n orange mangoes | Urad bean | gram Red gram | Fenugreek | potato tomato | |

### Some information regarding the important crops of Pakistan:

- **Cotton:** It is the most important cash crop of Pakistan. During 2017-18, cotton production stood at 11.935 million bales. As of 2018, Pakistan is the fourth largest producer of, and third largest consumer of Cotton in the World.
- **Sugarcane:** Sugarcane is a high value cash crop of Pakistan. It provides raw material for sugar industry which is the country's second largest agro-industry sector after textiles.
- **Rice:** In Pakistan, rice is an important food as well as cash crop. After wheat, it is the second main staple food crop and second major exportable commodity (cash crop) after cotton.
- **Wheat:** Wheat is the principle food crop of Pakistan. It accounts for 9.1 percent of the value added in agriculture and 1.7 percent of GDP of Pakistan ( as of 2018).
- **Maize:** Maize is an important food grain as well as raw material for edible oil production. It is also used to produce starch and poultry food mixes. It contributes 2.4 percent of value added in agriculture and 0.5 percent to GDP (2018).

# Economy

## Information regarding Pakistan's GDP

**Sector-wise contribution of industries to the GDP of Pakistan:**

| Year | Agriculture Sector (%) | Industrial Sector (%) | Service Sector (%) |
|---|---|---|---|
| 1999-2000 | 27.08 | 19.31 | 53.61 |
| 2000-2001 | 25.94 | 19.71 | 54.35 |
| 2001-2002 | 25.53 | 19.52 | 54.96 |
| 2002-2003 | 25.23 | 19.76 | 55.00 |
| 2003-2004 | 24.10 | 21.54 | 54.36 |
| 2004-2005 | 23.98 | 21.34 | 54.68 |
| 2005-2006 | 23.01 | 20.95 | 56.04 |
| 2006-2007 | 22.55 | 21.38 | 56.07 |
| 2007-2008 | 21.87 | 22.09 | 56.04 |
| 2008-2009 | 22.55 | 20.87 | 43.41 |
| 2009-2010 | 22.03 | 21.04 | 43.07 |
| 2010-2011 | 21.68 | 20.95 | 42.59 |
| 2011-2012 | 21.63 | 20.95 | 42.59 |
| 2012-2013 | 21.42 | 20.36 | 41.78 |
| 2013-2014 | 21.10 | 20.45 | 41.56 |
| 2014-2015 | 20.71 | 20.67 | 41.39 |
| 2015-2016 | 19.84 | 20.90 | 40.74 |
| 2016-2017 | 19.27 | 20.77 | 40.03 |
| 2017-2018 | 18.99 | 20.58 | 39.57 |
| 2018-2019 | 18.74 | 19.74 | 38.48 |
| 2019-2020 | 19.31 | 19.29 | 38.60 |
| 2020-2021 | 19.2 | 19.1 | 38.3 |
| 2021-2022 | 22.7 | 19.1 | 41.8 |
| 2022-2023 | 22.91 | 18.47 | 41.39 |

## GDP per Capita of Pakistan as per the World Bank (from 2010 onwards):

| Year | Per Capita Income in US Dollars |
|---|---|
| 2010 | 987.41 |
| 2011 | 1164.98 |
| 2012 | 1198.11 |
| 2013 | 1208.90 |
| 2014 | 1251.16 |
| 2015 | 1356.67 |
| 2016 | 1368.45 |
| 2017 | 1464.99 |
| 2018 | 1482.31 |
| 2019 | 1284.70 |
| 2020 | 1260 |
| 2021 | 1505 |
| 2022 | 1597 |

## Information Regarding Imports & Exports

### Top exports of Pakistan:

| Exports of Pakistan |
|---|
| Miscellaneous textiles, worn clothing |
| Cotton |
| Knit or crochet clothing, accessories |
| Clothing, accessories (not knit or crochet) |
| Cereals |
| Leather/animal gut articles |
| Sugar, sugar confectionery |
| Mineral fuels including oil |
| Beverages, spirits, vinegar |
| Salt, sulfur, stone, cement |

### Pakistan's percentage of imports and exports by country are as follows for Fiscal Year 2022-23:

**Imports**

- China: 21%
- United Arab Emirates: 10%
- Saudi Arabia: 7%
- Indonesia: 8%
- United States: 4%

**Exports**

- United States: 19%
- China: 8%
- United Kingdom: 7%

- United Arab Emirates: 5%
- Germany: 6%

## Pakistan Major Exports 2022-23

The potential export growth is hindered owed to lack of diversification in export goods. The trend of Pakistan's exports of major items remains more or less same having concentrated on three items, namely cotton manufactures, leather and rice (See Table 8.2). These three categories account for 68.1 percent of total exports during Jul-Mar FY2023. Among these few items cotton manufactures remain major contributor with 57.3 percent share in total exports, followed by leather (3.2 percent), rice (7.6 percent) and other items (31.9 percent).This pattern shows that Pakistan's export is still exporting few items.

| COMMODITY | SHARE IN TOTAL EXPORTS |
|---|---|
| Cotton Manufactures | 57.3% |
| Leather & Leather Manufactures | 3.2% |
| Rice | 7.6% |
| Sub-total of three items | 68.1% |
| Other Items | 31.9% |
| Total | 100% |

## China Pakistan Economic Corridor (CPEC)

**The China Pakistan Economic Corridor (CPEC)** starts from Kashgar in China and ends at Gwadar, Pakistan. It covers a total length of over 3000 kms. The "Silk Road Economic Belt" is in its north and the "21st Century Maritime Silk Road" is in its south. The project includes the construction of projects related to roads, railways, oil and gas, and cable channels. The Corridor's plan greatly enhances the cooperation between China and Pakistan in many fields, such as infrastructure, energy resources, agriculture and irrigation, information and communications etc. Initial budget planned for CPEC was $45-46 Billion, which was later increased to $55 Billion. Pakistan and China signed a total of 51 MoU for CPEC.

## Banking Industry of Pakistan

### Some prominent 'firsts' in the banking industry of Pakistan:

- **First Women's Bank:** First Women Bank Ltd. was set up in 1989 by the then PM Benazir Bhutto, to cater to the the banking needs of women. The Bank commenced its business on 2nd December, 1989.
- **The First MicroFinance Bank Ltd:** The First MicroFinanceBank Ltd, Pakistan (FMFB-P) was established in 2002 as a nation-wide microfinance bank. The first of its kind, it was established to enhance the economic well-being of society by providing banking services to thousands of under-privileged households, who are not catered to by conventional banks

### Some more information about the Banking industry of Pakistan:

- First commercial bank of Pakistan: Habib Bank Ltd. (started operations in 1947)
- Largest commercial bank in Pakistan: Habib Bank Ltd. (over 1,700 branches and 2100+ ATMs globally, serving 30 million customers across three continents.)
- List of Banks operating in Pakistan (standard):
  - i. Al Baraka Bank (Pakistan) Limited.
  - ii. Allied Bank Limited.
  - iii. Askari Bank Limited.
  - iv. Bank Alfalah Limited.
  - v. Bank Al-Habib Limited.
  - vi. BankIslami Pakistan Limited.
  - vii. Burj Bank Limited.
  - viii. Citi Bank N.A.
  - ix. Deutsche Bank A.G.
  - x. Dubai Islamic Bank Pakistan Limited.
  - xi. Faysal Bank Limited.
  - xii. First Women Bank Limited.
  - xiii. Habib Bank Limited.
  - xiv. Habib Metropolitan Bank Limited.
  - xv. Industrial and Commercial Bank of China
  - xvi. Industrial Development Bank of Pakistan.
  - xvii. JS Bank Limited.
  - xviii. MCB Bank Limited.
  - xix. MCB Islamic Bank Limited.
  - xx. Meezan Bank Limited.
  - xxi. National Bank of Pakistan.
  - xxii. NIB Bank Limited.
  - xxiii. S.M.E. Bank Limited.
  - xxiv. Samba Bank Limited.
  - xxv. Silk Bank Limited.
  - xxvi. Sindh Bank Limited.
  - xxvii. Soneri Bank Limited.
  - xxviii. Standard Chartered Bank (Pakistan) Limited.
  - xxix. Summit Bank Limited.
  - xxx. The Bank of Khyber.
  - xxxi. The Bank of Punjab.
  - xxxii. The Bank of Tokyo-Mitsubishi Limited.
  - xxxiii. The Punjab Provincial Cooperative Bank Limited.
  - xxxiv. United Bank Limited.
  - xxxv. Zarai Taraqiati Bank Limited.
- List of Banks operating in Pakistan (microfinance):
  - i. Advans Micro Finance Bank Limited.
  - ii. APNA Micro Finance Bank Limited.
  - iii. FINCA Micro Finance Bank Limited.
  - iv. Khushhali Bank Limited.
  - v. Mobilink Microfinance Bank Limited.
  - vi. NRSP Micro Finance Bank Limited.
  - vii. Pak Oman Micro Finance Bank Limited.
  - viii. Tameer Micro Finance Bank Limited.
  - ix. The First Micro Finance Bank Limited.
  - x. U Micro Finance Bank Limited.

## Miscellaneous

- **Pakistan's exchange rate policy:** Pakistan's policy is a "market based exchange rate system" that follows supply and demand. This means the policy can be more or less described as a flexible exchange rate.
- **History and Highlights of US Aid to Pakistan:**
  - US Aid to Pakistan began in the year 1948
  - US economic assistance to Pakistan peaked in 1962, at over $2.3bn
  - In 2010, military assistance to Pakistan totaled $2.5bn - including $1.2bn in coalition support funds
  - US assistance to Pakistan reached its lowest level in the 1990s, after President George H.W. Bush suspended aid flows over Pakistan's emerging nuclear programme in the year 1990
  - US military assistance dropped dramatically during and immediately after the Indo-Pakistani wars of 1965 and 1971
  - In April 1979, President Carter suspended all aid to Pakistan (except food aid) in response to Pakistan's decision to construct a uranium enrichment facility
  - Although US assistance (both economic and military) to Pakistan has fluctuated considerably over the last 60 years, it has risen steadily since 2001
  - According to a January 2, 2018 report by an American think-tank, the US Foreign Assistance to Pakistan had stood at $ 653 million in 2013, $ 630 million in 2014, $ 691 million in 2015, $ 687 million in 2016, $ 392 million in 2017 and just $ 345 million in 2018.

# Energy

## Power Plants of Pakistan

### Thermal Power Plants:

| Station | Location | Capacity (MW) |
|---|---|---|
| Kot Addu Power Company | Kot Addu, Punjab | 1,600 |
| Hub Power Company | Hub, Balochistan | 1,292 |
| Hubco Narowal Power Plant | Narowal, Punjab | 225 |
| Jamshoro Power Station | Jamshoro, Sindh | 850 |
| Bin Qasim Power Plant I | Karachi, Sindh | 1,260 |

### Natural Gas Power Plants:

| Station | Location | Capacity (MW) |
|---|---|---|
| Guddu Thermal Power Plant | Guddu, Sindh | 2,402 |
| Uch-I, II Power Plant | Dera Murad Jamali, Balochistan | 1000 |
| Nandipur Power Project | Gujranwala, Punjab | 425 |
| Roush (Pakistan) Power Limited | Abdul Hakeem, Pakistan, Punjab | 450 |
| Bin Qasim Power Plant II | Karachi, Sindh | 560 |
| Haveli Bahadur Shah Power Plant | Jhang, Punjab | 1,230 |
| Bhikki RLNG-based Power Project | Sheikhupura, Punjab | 1,180 |
| Balloki Power Plant | Balloki, Punjab | 1,223 |

### Coal Power Plants:

| Station | Location | Capacity (MW) |
|---|---|---|
| Sahiwal Coal Power Project | Sahiwal, Punjab | 1320 |
| Port Qasim Coal Power Project | Karachi, Sindh | 1320 |
| Hub Coal Power Project | Hub, Balochistan | 1320 |
| Engro Powergen Thar | Tharparkar, Sindh | 660 |

### Hydel Power Plants:

| Station | Community | Capacity (MW) |
|---|---|---|
| Tarbela Dam | Tarbela, KPK | 4,888 |
| Ghazi-Barotha Hydropower Project | Attock, Punjab | 1,450 |
| Mangla Dam | Mirpur, Azad Kashmir | 1,150 |
| Neelum–Jhelum Hydropower Plant | Muzaffarabad, Azad Kashmir | 969 |
| Warsak Dam | Peshawar, KPK | 243 |
| Chashma Barrage | Chashma, Punjab | 184 |
| Duber Khwar Hydropower Project | Kohistan, KPK | 130 |
| Allai Khwar Hydropower Project | Mansehra, KPK | 121 |
| Golen Gol Hydropower Project | Chitral, KPK | 108 |
| Jinnah hydropower project | Jinnah Barrage, Punjab | 96 |
| New Bong Escape Hydropower Plant | Mirpur, Azad Kashmir | 84 |
| Daral Khwar Hydropower Plant | Swat District, KPK | 36.6 |
| Jagran-I Dam | Neelum, Azad Kashmir | 30.4 |
| Rasul Barrage Hydropower Project | Mandi Bahauddin, Punjab | 22 |

| | | |
|---|---|---|
| Gomal Zam Dam | South Waziristan | 17.4 |
| Satpara Dam | Skardu | 17.3 |
| Shadiwal Hydropower Plant | Shadiwal Warriach, Punjab | 13.5 |
| Chichonki Malian Hydropower Plant | Sheikhupura, Punjab | 13.2 |
| Marala Hydropower Project | Sialkot, Punjab | 7.64 |
| Mirani Dam | Turbat, Balochistan | 117 |

### Dams/power plants (current and proposed) of Pakistan and the water bodies they flow on:

- Tarbela: River Indus
- Ghazi-Brotha: River Indus
- Mangla: River Jhelum
- Neelum-Jhelum: River Jhelum
- Warsak: Kabul River
- Chashma: River Indus
- Duber khwar: River Indus
- Allai khwar: River Indus
- Golen Gol: Mastuj
- Jinnah Hydropower: River Indus
- New Bong Escape: Upper Jhelum
- Daral khwar: Swat River
- Jagran Dam: Neelum
- Rasul Barrage: Jhelum
- Gomal Zam: River Indus
- Satpara: Satpara lake
- Shadiwal: Upper Jhelum Canal
- Chichonki Malian: Upper Chenab Canal
- Marala: Chenab river
- Kala Bagh: River Indus
- Diamer Bhasha: River Indus
- Mohmand: Swat River
- Nai Gaj: Gaj River
- Khanpur Dam: Haro River
- Miraani Dam: Dasht River
- Kotri Barrage (aka Ghulam Muhammad Barrage): Indus River
- Wali Tangi Dam: Walitangi River
- Simly Dam: Soan River

## Nuclear Power Plants:

| Station | Community | Capacity (MW) | Completed with the Help of |
|---|---|---|---|
| (KANUPP-1) | Karachi, Sindh | 85 | Canada |
| (CHASNUPP-1) | Mianwali, Punjab | 320 | |
| (CHASNUPP-2) | Mianwali, Punjab | 320 | |
| (CHASNUPP-3) | Mianwali, Punjab | 340 | |
| (CHASNUPP-4) | Mianwali, Punjab | 340 | |

## Under construction Nuclear Power Plants

| Station | Community | Capacity (MW) |
|---|---|---|
| (KANUPP-2) | Karachi, Sindh | 1100 |
| (KANUPP-3) | Karachi, Sindh | 1100 |
| (CHASNUPP-5) | Mianwali, Punjab | 1100 |

## Wind Power Plants:

| Station | Community | Capacity (MW) |
|---|---|---|
| Zorlu Enerji | Jhimpir, Sindh | 56.4 |
| Jhimpir Wind Energy Project | Jhimpir, Sindh | 50 |
| Sachal Energy Wind Farm | Jhimpir, Sindh | 50 |
| United Energy Ltd | Jhimpir, Sindh | 100 |
| Tricon Boston Corporation | Jhimpir, Sindh | 150 |

## Solar Power Plants:

| Station | Community | Capacity (MW) |
|---|---|---|
| Quaid-e-Azam Solar Park | Bahawalpur, Punjab | 400 |
| Harappa Solar Pvt Ltd | Sahiwal, Punjab | 18 |

# Communication

## Motorways of Pakistan:

| Name | Course | Length |
|---|---|---|
| M-1 | Peshawar–Islamabad | 155 km |
| M-2 | Islamabad–Lahore | 367 km |
| M-3 | Lahore–Abdul Hakeem | 230 km |
| M-4 | Pindi Bhattian–Multan | 286 km |
| M-5 | Multan–Sukkur | 387 km |
| M-6 | Sukkur–Hyderabad | 296 km |
| M-7 | Dadu–Hub | 270 km |
| M-8 | Ratodero–Gwadar | 892 km |
| M-9 | Hyderabad–Karachi | 136 km |
| M-10 | Karachi Northern Bypass | 57 km |
| M-11 | Sialkot–Lahore | 89 km |
| M-13 | Swabi-Chakdara | 81 km |
| M-14 | Hakla–Dera Ismail Khan | 280 km |

## Important Highways of Pakistan:

| Name | Course | Length | Date of Completion |
|---|---|---|---|
| Grand Trunk Road (GT Road) | Teknaf (Bangladesh) to Kabul (Afghanistan) In Pakistan, Lahore to Peshawar | 2400 km | |

| | | | |
|---|---|---|---|
| Indus Highway or N-55 | Kotri to Peshawar | 1264 km | |
| Karakoram Highway | Between China and Pakistan | 1300 km | 1977 |

# Natural Resources

## List of Important Minerals and their Location in Pakistan:

| Minerals | Location |
|---|---|
| Mineral Oil | Dhullian, Kot Mayyal, Attock, Chakwal, Dhodhak, Badin, Hyderabad, Dadu, and Potwar Plateau. |
| Natural Gas | Khairpur, Mazrani, Hundi, Kandhkot, and Seri, Dhodhak, Pir Koh, Mayyal and Dhullian. |
| Coal | Dandot and Makkarwal, Mianwali, Sharag, Khost, Harnai and Mach, Tharparkar, Thatta and Larkana. |
| Gypsum | Mianwali, Dera Ghazi Khan, Kohat, Rohri, Quetta and Sibi. |
| Iron Ore | Kala Bagh, Hazara district, Chitral, Khuzdar, and Muslim Bagh. |
| Chromite | Muslim Bagh, Chaghi, Kharan, Malakand, and North Waziristan. |
| Copper | Saindak and Chaghi. |
| Salt | Khewra in Jhelum, Warchha in Khushab, Kala Bagh, Bahadur Khel, and Mauripur near Karachi. |
| Limestone | Jhelum, Dera Ghazi Khan, Moghul Kot, Hyderabad, Manghopir, Kot Diji, and Ranipur. |
| Marble | Chaghi, Mardan, Swat and Khyber Agency, Black and white marble in the Kala Chitta Hills in Attock. |

## Some Facts about Minerals in Pakistan

- The Reko Diq mine is located near Reko Diq town in Chagai District, Baluchistan, Pakistan. It is one of the largest copper and gold mines in the world located in the south west part of Pakistan in Balochistan province.
- Sulphur deposits are available at Koh-e-Sultan in District Chaghi.

# Miscellaneous Facts about Pakistan

1. **Vital Signs** started in 1986 in the city of Rawalpindi, Pakistan. The band members included Rohail Hyatt, Shahzad Hasan and later Junaid Jamshaid.
2. **Gwadar**: It was bought by Pakistan for $3 million on September 8th, 1958 and it was officially made part of Pakistan on December 8th, 1958. Gwadar was under Omani rule for 200 years. It became a part of the district of Makran (coastal area of Balochistan which is semi-desert) but later on this district was divided into two smaller and Gwadar became its own district.
3. **Zhob** – a city in Baluchistan – was originally called Apozai but later the name was changed in 1889 for Sir Robert Sandeman until 1970s and then it was renamed as "Zhob".
4. Through the **General Sales Tax Act** in 1948, Sales Tax was declared a federal subject.
5. **Quaid-e-Azam** attended the Sindh-Madrasa-tul-Islam and the Christian Missionary Society High School in Karachi.
   - His father's name was Jinnahbhai Poonja, who was a merchant.
   - His mother's name was Mithibai.
   - He had six other siblings and was the eldest. From them, only his sister Fatima Jinnah is well known, who played a prominent role in Pakistan's struggle and history.
   - He was married twice. His first wife was his distant cousin, Emibai Jinnah. They got married before Quaid left for his studies in England. She passed away while Quaid was away for his studies as a lawyer.
   - Quaid remarried in 1918 a woman by the name of Rattanbai Petit (later Rattanbai Jinnah). She was born into an affluent Parsi family in Bombay, to Dinshaw Petit. She passed away in 1929.
   - In 1919, Quaid and Rattanbai had a daughter, Dina Jinnah (later Dina Wadia). She was the only child Quaid ever had. Dina married a Parsi businessman by the name of Neville Wadia. Her descendants are part of the Wadia family in India.
6. **International Labor Organization** – which set the international standards for decent working conditions and environment and justice for the laborers. Many Pakistanis have been elected members of the ILO throughout the years as Pakistan has been an active part of ILO.
7. **Chris Gayle**: He plays for the West Indies team. He beat Shahid Afridi's record in 2019 of most sixes in Tests, ODIs and T20Is combined.
1. **Qutb-ud-Din Abek** died in 1210 while playing polo. He died an unfortunate and sudden death. He is buried in Anarkali in Lahore. He was succeeded by another slave who went up to the power of a Sultan - Shamsuddin Iltutmish.
2. **The Mausoleum of Quaid-e-Azam** The structure was completed in 1970 and was designed by an Indian architect, Yahya Merchant.
3. **Jaipur/Pink City** Most of the city's buildings and houses are painted pink. During the Prince of Wales' tour of India in 1876, the Maharaja Sawai Ram Singh of Jaipur painted the whole city pink to welcome him.
4. **Official language of J&K** Parliament of India passed a bill in 2020 to make Kashmiri the official language of Jammu and Kashmir along with Urdu, Dogri, Hindi and English.
5. **All Parties Hurriyat Conference** Also called the Tehreek e Hurriyat which was founded on 9 March 1993 by Mirwaiz Umar Farooq – chairman Awami Action Committee in Kashmir – who is considered a spiritual leader of the Muslims of Kashmir Valley. He is a staunch advocate of the Kashmiri freedom movement and strongly believes that Pakistan and India need to hold dialogue regarding Kashmir. His struggles have won him a place in the list of *The 500*

*Most Influential Muslims* by the Royal Islamic Strategic Studies Centre in Jordan. Moreover, the All Parties Hurriyat Conference is an association of 26 organisations – social, religious and political – which has been forwarding the cause of Kashmiri struggle and separatism. Its first convener was Mehmood Ahmed Saghar.

6. **"Mirwaiz"** is a title given to a preacher or a chief in the Kashmir Valley. It is associated with an institution of head priests. The Mirwaiz are supposed to preach religion but overtime, they have started getting involved in political and social activities.
7. **Pakistan's separation from British Dominion** Pakistan officially separated itself from the British Dominion by adopting a republican constitution on 23 March 1956. Before this Pakistan used The Government of India Act 1935 as interim constitution and wasn't entirely separated from Britain just like Canada and Australia. For Pakistan to become an independent sovereign state, it had to have a constitution made by its elected representatives.
8. **Wular Lake/Tulbul Project** It is one of the largest lakes in Asia that contains fresh water. It is located on the Indian side of Kashmir in the district of Bandipora. It is fed water through the Jehlum River. The Tulbul Project was devised in 1980 and work started in 1984. India has faced pressure from Pakistan regarding this project because according to Pakistan, it violated the terms of the Indus Water Treaty of 1960.

8. According to a Pew research in 2015, Pakistan is third on the list of countries with the largest Muslim population.

## All Pakistan Music Conference (APMC)

***15 September 1959***

A meeting was held between individuals who were concerned about the future of music in Pakistan, so they created the APMC to conduct concerts and other music festivals for the promotion of music.

**Pakistan's Hockey World Cups** *4-time winner*

It is the most times any team has won the title. The years in which Pakistan won the Hockey World Cups were 1971, 1978, 1982 and 1994.

**MacMohan Line, LAC, Sir Creek**

MacMohan Line is an area between Tibet and India over which there is a Sino-Indian dispute. Actual Line of Control (LAC) is the border which separates the area of India and China and was demarcated in 1962 after the Sino-Indian war. Sir Creek is the politically disputed area between Pakistan and India. This area is between Sindh in Pakistan and Gujrat in India. There is dispute on Sir Creek because it is possible that there are huge oil and gas reserves there which have remained unexploited due to this issue between the two countries.

**Master Plan of Islamabad City**

Islamabad was designed as a triangular city and its apex was facing the Margalla Hills. It was designed by a Greek firm and the leadership of the project was taken by Konstantinos Apostolos Doxiadis who designed the master plan.

**1. Formulas of Kashmir**

After partition and the start of the Kashmir issue, there have been a total of seven formulas proposed to resolve that issue. They are:

i. **Status Quo**
Currently Kashmir is divided into two parts, one of them is administered by Pakistan and the other by India. India proposed that the current situation be made permanent i.e., to accept the LoC (Line of Control) as an internationally accepted border. But Pakistan and Kashmiris greatly opposed this idea.

ii. **Kashmir joins Pakistan**
Pakistan has time and again proposed this and advocated this to be the best solution since Kashmir has a Muslim majority. But there are Hindus in Jammu and Buddhists in Ladakh who have never expressed a desire to join Pakistan so because of this discontent, nobody has proceeded with this formula.

iii. **Kashmir joins India**
It again brings the same issue to light that the Muslim majority of Kashmir would never accept this hence, no progress has been made on this front either.

iv. **Kashmir becomes independent**
This formula would wholly and solely be opposed by both India and Pakistan because both countries have claimed territory on Kashmir that they do not have any intentions of giving up. If Kashmiris were to vote to become independent, it would be strongly opposed by India and Pakistan. Moreover, some Kashmiris have sworn allegiance to either country which they do not wish to revoke.

v. **Smaller Independent Kashmir**
An area would be carved out that does not include Ladakh or the Northern areas occupied by Pakistan. It would be an independent state and both countries would still have hold over some areas of their sides of Kashmir. But this has not been convincing enough for either country to hold discussions or talks about it.

vi. **Independent Kashmir Valley**
This would give independence to people from the Indian government that has been keeping them under lockdown and controlling their lives. It would also give some freedom to the people living under fear, but this is unacceptable to India and also it would not be an economically viable solution as the valley is under great economic crisis due to Indian occupation.

vii. **Chenab Formula**
Abdul Qayyum was a Kashmiri politician who also became the Prime Minister and President of AJ&K and he was the one who proposed this formula. The Chenab Formula proposed that Kashmir be divided along the Chenab River; the Northern side would go to Pakistan and Southern side would go to India.

2. **One Belt One Road projects in Pakistan**
The three projects are CPEC, Orange Line Metro Train (Lahore), and Safe Cities (Islamabad).
Safe Cities is basically a project to create safe living spaces for Chinese workers and also introduce the concept of safer infrastructure and living spaces to Pakistan.
3. Emeralds are found in the Swat Valley (KPK) whereas, spinel and rubies are found in the Hunza Valley in Gilgit-Baltistan.

**The tomb of Jahangir** is built in the middle of a garden on the right bank of River Ravi at Shahdara town, located on the outskirts of Lahore. He was buried in a garden called, Dilkusha, owned by Queen Noor Jahan. The monument took ten years to complete, with a total cost of approximately Rs.10 lakh. Most of the contemporary court accounts credit the son of Jahangir, Shahjahan, with the construction of his tomb. However, some accounts credit it to Noor Jahan.

**Pakistan inherited only 34 industrial units out of the existing 921 industrial units in subcontinent, at the time of independence.** They were cotton textile, cigarettes, sugar, rice husking, cotton ginning and flour milling industries. Combined, these industries contributed 7% of the GDP at the time, and employed around 26,000 employees.

Mrs. Vijay Lakshmi Pundit, Nehru's sister and a prominent figure, stated about Quaid-e-Azam that, "If the Muslim League had 100 Gandhis and 200 Azads and Congress had only one Jinnah, then India would not have been divided!"

**The Indus Waters Treaty** is a water-distribution treaty between India and Pakistan, brokered by the World Bank, to use the water available in the Indus River and its tributaries. It was signed in Karachi on 19 September 1960 by the then Indian Prime Minister Jawaharlal Nehru and the then Pakistani President Ayub Khan. The Treaty gives control over the three "eastern rivers" — the Beas, Ravi and Sutlej— to India, and the control of the waters from the three "western rivers" — the Indus, Chenab and Jhelum— was given to Pakistan.

**Pakistan's Nuclear Weapons Policy:** Pakistan does not have an officially declared nuclear use doctrine. Ever since it became a nuclear power, the country has refused to declare a no-first-use policy, which effectively means that the country retains the option of using nuclear weapons first in the event of a war. This has been a constant policy owing to the growing conventional weapons asymmetry in India's favor. Thus, by keeping the first use option open, Pakistan aims to deter any kind of attack against its territory.

**Pakistan's Foreign Policy:** The policy seeks to protect, promote and advance Pakistan's national interests on the international/world stage. Article 40 of the Constitution of Pakistan states that: "The State shall endeavour to preserve and strengthen fraternal relations among Muslim countries based on Islamic unity, support the common interests of the peoples of Asia, Africa and Latin America, promote international peace and security, foster goodwill and friendly relations among all nations and encourage the settlement of international disputes by peaceful means."

The proposal of name "**All India Muslim League**" in 1906 was by Nawab Saleem Ullah Khan and it was given support by Maulana Muhammad Ali Jauhar, Syed Nabiullah, Hakim Ajmal Khan, Zafar Ali Khan, and Syed Zahur Ahmad, along with many others. Nawab Saleem Ullah Khan was the Nawab of Dhaka.

## Indian National Congress:

**Inception:** 28th December 1885 at Gokuldas Tejpal Sanskrit College, Bombay.
**Purpose:** The main aim of this political party was to unify all Indians and create harmonious relations between the British and the educated Indians; they wanted to create a space for Indians in the government where they could represent their people.
**Objectives:** The first session of the Indian National Congress was conducted by W.C. Banerjee at Mumbai in December 1885 where he declared the objectives of the political party to be the following:

i. Furthering the feeling of national unity among the Indians as the British did not consider India to be a nation at the time but merely a piece of land,
ii. Construct the demands of Indians and dispensed them to the government,
iii. Gathering all the major leaders of India and bringing them in one place,
iv. The opinions of people in India were assembled and lined up to make them more coherent and consistent.

## The timeframes of The Five-Year Plans of Pakistan:

- First: 1955-1960
- Second: 1960-1965
- Third: 1965-1970
- Fourth: 1970-1975
- Fifth: 1978-1983
- Sixth: 1983-1988
- Seventh: 1988-93
- Eighth: 1993-98

## Some Miscellaneous Facts:

- Last governor of the undivided Punjab was Sir Evan Meredith Jenkins. His tenure was from April 1946 till 15 August 1947.
- Prior to the partition, Liaquat Ali Khan briefly tenured as the first finance minister in the interim government from 1946 till 14th August 1947, led by its Governor General Mountbatten.
- Allama Iqbal participated in the Round Table Conferences of 1931 and 1932.
- 1965 Election: During the campaign, Field Marshal Ayub Khan's symbol was red Rose, and Ms. Fatima Jinnah's symbol was a lantern.
- The 1965 Indo-Pak War lasted for 17 days.
- Former Pakistan PM Nurul Amin is the first and only Vice President in the history of Pakistan.
- The first Constituent Assembly's tenure was from 1947-1954.

- The purpose of increasing the total number of seats in the First Constituent Assembly of Pakistan from 69 to 79 was to give representation to princely states and refugees.
- The famous sentence "we will wage war for a thousand years" was spoken by Zulfiqar Ali Bhutto, during his speech at the UNSC on the 22nd of September, 1965, in the capacity of Pakistan's Foreign Minister, post the 1965 war. It was this speech that effectively marked his arrival on the Pakistani political scene.
- In terms of area, Pakistan is ranked as the 33rd largest country in the world.
- The population growth rate of Pakistan stands at 2.0%, as per World Bank's most recent data (2019).
- Pakistan's current literacy rate stands at 60% as per the Finance Division of the Government of Pakistan's most recent data (2018-2019).
- Total length of irrigation canals in Pakistan is ~64,000 km.
- The status of maternal health is poor in Pakistan. An estimated 30,000 women die each year due to pregnancy related causes. It is estimated that about 500 maternal deaths occur per 100,000 live births each year in Pakistan.
- Pakistan ranks 10th in the Misery Index as of 2019. The index helps determine how the average citizen is doing economically
- CHASHNUP has been built with the help of China.
- The number of tax filers for 2019 was at 3,000,453 till December 20, 2020. Previously, the highest figure of filing returns was at 2.85 million people for tax year 2018. FBR received 1.8 million returns for tax year 2020 up to the due date.
- Pakistan imports ~75% of its palm oil from Malaysia making it the biggest trade partner in terms of Palm Oil.
- Tarbela Dam in Pakistan, the largest earth-filled dam in the world, has 14 turbines.
- The Chairman Joint Chiefs of Staffs Committee is appointed by the Prime Minister of Pakistan.
- Pakistan's National Flag was designed by Syed Amir-uddin Kedwai.
- Mian Ferozuddin Ahmed is credited as being the first person to give the title of 'Quaid-e Azam' to Muhammad Ali Jinnah. It became an official title when Liaquat Ali Khan moved a resolution to that effect in the Constituent Assembly of Pakistan on the 11th of August 1947.
- Pakistan's ranking in the corruption index for the past Six years:

| Year | Rank |
|---|---|
| 2022 | 140 |
| 2021 | 140 |
| 2020 | 124 |
| 2019 | 120 |
| 2018 | 117 |
| 2017 | 117 |

- Zahid Husain was the founder and the first governor of State Bank of Pakistan. His tenure was from June 1948 to July 1953.
- Iran was the first country to recognize Pakistan as an independent state, and Shah Mohammad Reza Pahlavi was the first head of any state to come on an official state visit to Pakistan (in March 1950).
- 'Task Force-88' (TF-88) was established in December of 2016 by the Pakistan Navy. Its purpose is the maritime security of Gwadar port and protection of associated sea lanes against any and all threats.
- Dr. Usama Riaz was a Pakistani physician who lost his life on 23rd March 2020 due to the COVID-19 virus. He was actively involved in the treatment of people in intensive care diagnosed with COVID-19, despite lacking personal protective equipment, which increased his personal risk. He was the first Pakistani doctor to lose his life while on duty due to the pandemic.
- Mushtaq Ahmed Gurmani was the first Governor of the 'One Unit' of West Pakistan.
- Krishna Kumari Kolhi is a Pakistani politician belonging to the Pakistan Peoples Party, who is the first Hindu Dalit woman and the second Hindu woman to hold the position of Member of the Senate of Pakistan.
- PIA was founded on the 29th of October, 1946 as Orient Airways, in Calcutta, British India. It shifted its operations to Pakistan in 1947. Orient Airways was nationalized to form the Pakistan International Airlines Corporation (PIAC).
- Fateh Muhammad (FM) Khan was the first Chief Election Commissioner of Pakistan.
- The Naval War College is a staff college in Lahore, primarily for mid-career officers of the Pakistan Navy, as well as a limited number of officers from the Pakistan Air Force, Pakistan Army and various allied forces.
- Changa Manga is a man-made forest and is the largest in Pakistan. The forest covers an area of 48.6 square kms and is one of the largest man-made forests on the planet.
- Chaudhry Pervez Elahi is the only person to have served as the Deputy Prime Minister of Pakistan.

## Famous Books written by Pakistani/sub-continent Personalities or about Pakistan:

- Asaar-ul-Sanadid is an 1847 Urdu book by Sir Syed Ahmad Khan. It contains descriptions of all the notable monuments of Delhi at the time.
- 'Pakistan: A Hard Country' is a book by Anatol Lieven, published in 2011.
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- A Case of Exploding Mangoes, published in 2008, is a book by Mohammed Hanif based on the 1988 plane crash that killed President General Zia ul-Haq.

- The purpose of increasing the total number of seats in the First Constituent Assembly of Pakistan from 69 to 79 was to give representation to princely states and refugees.
- The famous sentence "we will wage war for a thousand years" was spoken by Zulfiqar Ali Bhutto, during his speech at the UNSC on the 22nd of September, 1965, in the capacity of Pakistan's Foreign Minister, post the 1965 war. It was this speech that effectively marked his arrival on the Pakistani political scene.
- In terms of area, Pakistan is ranked as the 33rd largest country in the world.
- The population growth rate of Pakistan stands at 2.0%, as per World Bank's most recent data (2019).
- Pakistan's current literacy rate stands at 60% as per the Finance Division of the Government of Pakistan's most recent data (2018-2019).
- Total length of irrigation canals in Pakistan is ~64,000 km.
- The status of maternal health is poor in Pakistan. An estimated 30,000 women die each year due to pregnancy related causes. It is estimated that about 500 maternal deaths occur per 100,000 live births each year in Pakistan.
- Pakistan ranks 10th in the Misery Index as of 2019. The index helps determine how the average citizen is doing economically
- CHASHNUP has been built with the help of China.
- The number of tax filers for 2019 was at 3,000,453 till December 20, 2020. Previously, the highest figure of filing returns was at 2.85 million people for tax year 2018. FBR received 1.8 million returns for tax year 2020 up to the due date.
- Pakistan imports ~75% of its palm oil from Malaysia making it the biggest trade partner in terms of Palm Oil.
- Tarbela Dam in Pakistan, the largest earth-filled dam in the world, has 14 turbines.
- The Chairman Joint Chiefs of Staffs Committee is appointed by the Prime Minister of Pakistan.
- Pakistan's National Flag was designed by Syed Amir-uddin Kedwai.
- Mian Ferozuddin Ahmed is credited as being the first person to give the title of 'Quaid-e Azam' to Muhammad Ali Jinnah. It became an official title when Liaquat Ali Khan moved a resolution to that effect in the Constituent Assembly of Pakistan on the 11th of August 1947.
- Pakistan's ranking in the corruption index for the past Six years:

| Year | Rank |
|---|---|
| 2022 | 140 |
| 2021 | 140 |
| 2020 | 124 |
| 2019 | 120 |
| 2018 | 117 |
| 2017 | 117 |

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- Hayat-e-Javed, which was published in 1901, is the biography of Sir Syed Ahmad Khan, written by Altaf Hussain Hali.
- 'The Reconstruction of Religious Thought in Islam' is a collection of lectures, in the form of a book, by Allama Muhammad Iqbal, published in 1930.
- 'Neither a Hawk nor a Dove: An insider's account of Pakistan's foreign policy' is a book written by Khurshid Mahmud Kasuri, published in 2015.
- "Thoughts on Pakistan" is a 1945 book written by B. R. Ambedkar.

## Largest, Smallest, Highest, National & First in Pakistan

1. **The largest radio station:** Islamabad Radio Station
2. **The highest radio station:** Gilgit Radio Station in Gilgit Baltistan.
3. **The most published and circulated newspaper:** The Daily Jang (Urdu).
4. **The largest commercial bank:** National Bank of Pakistan.
5. **The highest pass:** Muztagh Pass in Northern Areas
6. **The largest division in Khyber Pakhtoon Khawah:** The Malakand Division
7. **The smallest division in Khyber Pakhtoon Khawah:** The Mardan Division
8. **The smallest division in Balochistan:** The Naseerabad Division.
9. **The most densely populous district:** The districts of Lahore in the Punjab
10. **The lowest densely populous district:** The Awaran District in Balochistan
11. **The largest railway station:** The Lahore Railway Station.
12. **The highest railway station:** Khan Mehtarzai Railway Station, Balochistan
13. **The longest platform:** The platform of Rohri Railway Station (Sindh), with a length of about 1,894 feet. The platform of Sahiwal Railway Station (Punjab) is also believed to be the longest platform in Pakistan.
14. **The longest railroad:** Khyber Mail from Karachi to Peshawar, with a length of 1,045 miles (1,681 kilometers).
15. **The largest railway workshop:** The Mughalpura Railway Workshop in Lahore.
16. **The largest museum:** The Lahore Museum. Lahore.
17. **The largest and oldest university:** The Punjab University. Lahore.
18. **The largest mosque:** Shah Faisal Mosque. Islamabad, with an area of 1, 89,705 square meters.
19. **The longest railway Tunnel:** The Khojak tunnel, Baluchistan with a length of 2.43 miles.
20. **The longest highway:** The N-5 Highway from Karachi to Torkham, 1819 km.
21. **The highest road:** The Shahrah-e-Karakoram, Gilgit Baltistan
22. **The largest industry:** Cotton textiles Industry. Faisalabad is its main center.
23. **The largest industrial plant:** Pakistan Steel Mills, Karachi (Sindh).
24. **The highest civil award:** Nishan-e-Pakistan.
25. **The highest military award:** Nishan-e-Haider.
26. **The largest earth-filled dam:** The Tarbela Dam.
27. **The largest hydroelectric power station:** Tarbela Power Station, with an installed capacity of 4,888 MW, (Megawatts) and maximum capacity of 6,298 MW.
28. **The largest river:** The Indus River.
29. **The longest river:** The Indus River.
30. **The largest canal:** The Nara Canal above Sukkhur Barrage, 364 km.
31. **The largest lake:** Manchar lake in Dadu District, Sindh. It is also the largest lake in South Asia. It is 18 km away from Sehwan Sharif.
32. **The largest man-made lake:** Keenjhar Lake in Sindh, with a length of 32 kilometers (20 miles) and width of 10, kilometers (6 miles). It is about 25 kilometers from Thatta.
33. **The coldest place:** Skardu in Gilgit Baltistan, where a record -26°C was recorded on January 6, 1995. The previous, lowest temperature in Skardu was -21 °C recorded on January 11, 1986.
34. **The coldest city:** Ziarat, Balochistan.
35. **The rainiest City:** Rawalpindi, Punjab.
36. **The hottest place:** Jacobabad is the hottest place in Pakistan with temperatures reaching up to 51 degrees Celsius.
37. **The place of highest snowfall:** Skardu in Gilgit District, Gilgit Baltistan.
38. **The rainiest place:** Murree in Rawalpindi district (Punjab), with a mean annual rainfall of about 1,464 millimeters (mm), 164 centimeters (cm.).
39. **The highest peak:** K-2, In Skardu (Gilgit Baltistan)
40. **The largest seaport:** Karachi.
41. **The largest district in Punjab:** The Bahawalpur District in the Bahawalpur Division, with an area of 24,830 square kilometers.
42. **The largest division:** The Kalat Division in Balochistan, area: 140,612 square kilometers.
43. **The smallest division:** The Mardan Division in KP. area: 3046 square kilometers.
44. **The largest division in Punjab:** The Bahawalpur Division; area: 45,588 square kilometers.
45. **The smallest division in Punjab:** The Sahiwal Division, area: 10,302 square kilometers.
46. **The smallest division in Sindh:** The Karachi Division, area: 3,528 square kilometers.
47. **The largest industrial and trade center:** Karachi Sindh.
48. **The largest shipping company:** The Pakistan National Shipping Corporation (PNSC), Karachi.
49. **The largest desert:** The Thar Desert, Sindh.
50. **Most Populous Province:** Punjab.
51. **Least Populous Province:** Balochistan is the least populous province.
52. **The largest province:** Balochistan, with an area of 347,190 square kilometers.
53. **The smallest province:** Khyber Pakhtunkhwa, with an area of 101,741 square kilometers.
54. **The most populous city:** Karachi (Sindh)

55. **First Woman Governor of State Bank:** Dr. Shamshad Akhtar.
56. **First Woman Spokesperson:** Ms. Tasneem Aslam.
57. **In 1952 Sui Gas was first** discovered in Pakistan
58. **Qadir Pur gas field** is the second largest in Pakistan under OGDCL.
59. **First Pakistani to climb Mount Everest:** Nazir Sabar
60. **First Pakistani to reach South Pole:** Namira Saleem
61. **National bird** of Pakistan is Chakor.
62. **Largest Island:** Astola Island is the biggest island of Pakistan with area of 6.7 km square and home to endangered green turtles.
63. **Highest Park in Pakistan:** Deosai National Park is a national park located in the Northern Areas of Pakistan, and is the highest in Pakistan. It is one of the highest plateaus in the world with an approximate height of over 4,000 metres above sea level.
64. **Largest Park in Pakistan:** Central Karakoram National Park in Gilgit-Baltistan, established in 1993, with an area of 9, 73,845 ha.
65. **Longest Coastline of Pakistan:** It is the Balochistan coastline which is about 770 kms long.
66. **Lowest Rainfall:** NoKKundi in Balochistan has the lowest rainfall in Pakistan.
67. **First Dry Port:** Lahore Dry Port was the first dry port in Pakistan. It was constructed and managed by Pakistan Railways since 1973.
68. **First lady Major General:** Major General (Rtd.) Shahida Malik
69. **First lady Lieutenant General:** Lieutenant General Nigar Johar Khan

## Famous Personalities of Pakistan

1. **Abdul Hassan Asfahani-** was Pakistan's first ambassador to the USA.
2. **Habba Khatoon-** also known by the honorary title of Nightingale of Kashmir, was a Kashmiri Muslim poet and ascetic.
3. **Mustaq Ahmad Yousafi**, a renowned Urdu writer was a Banker by Profession.
4. **Muhammad Razi Ud din Siddique-** worked under the renowned scientist Albert Einstein.
5. **Noor Ul Amin-** was the only vice President of Pakistan.
6. **Abdur Rab Nishtar-** was the first governor of Punjab.
7. **Nawab Malik Amir Muhammad Khan-** also known as the Nawab of Kala Bagh was the governer of West Pakistan in 1960, and was from Mianwali.
8. **Ayesha Farooq-** is the first lady fighter pilot of Pakistan.
9. **Faiz Ahmad Faiz-** Imprisoned for the first time in Rawalpindi Conspiracy case.
10. **Ustad Allah Baksh-** was the famous painter of Pakistan.
11. **Majida Rizvi:** She has the honor of being the first woman judge of a High Court in Pakistan.
12. **Abdul Ghaffar Khan** (aka Bacha Khan) was a Pashtun leader and Independence activist. He was widely known for his pacifism; and owing to his similar views and friendship with Gandhi, he was dubbed the Sarhadi Gandhi. He was a staunch advocate for Hindu–Muslim unity in the Indian subcontinent. In 1929, he founded the nonviolent anti-colonial movement known as the Khudai Khidmatgar. The British launched a severe crackdown against the movement and it suffered some of the most severe repression of the entire Indian independence movement. In June 1947, Khan along with Khudai Khidmatgar leaders issued the Bannu Resolution to the British. The resolution demanded that the ethnic Pashtuns be given a choice to have an independent state of Pashtunistan, comprising all of the Pashtun territories of British India and not be included within Pakistan. However, the British refused to comply with the demands of this resolution. After the Partition, Khan pledged allegiance to Pakistan, and stayed in the NWFP.
13. **Maulana Zafar Ali Khan** was a writer journalist and politician from Gujranwala, Punjab. He graduated from Aligarh College and served as private secretary to the vice-chancellor of the college, Nawab Mohsin ul Mulk. He was also the founding editor of the newspaper 'Zamindar', which became a mouthpiece for Muslim anti-colonial politics. In 1945-46 he was elected to the Central Legislative Assembly as a Muslim League nominee.
14. **Shah Abdul Latif Bhittai** was a Sindhi Sufi saint. He is considered to be one of the greatest poets of the Sindhi language. His collected poems are assembled in the compilation known as "Shah Jo Risalo", which exists in numerous versions and has been translated to English, Urdu, Punjabi, German and other languages.
15. **Sir Zafarullah Khan** was a former Pakistani jurist, who is the first Pakistani who, in addition to being the first foreign Minister of Pakistan, became, in 1954, a Judge at the International Court of Justice (ICJ) in The Hague. He held the position until 1961. He represented Pakistan at the UN in 1961–64 and served as president of the UN General Assembly (the first and only Pakistani to do so) in 1962–63. Returning to the International Court of Justice in 1964, he served as the court's president from 1970 to 1973.
16. **Amjadi Bano Begum**, widow of Maulana Mohammad Ali Johar, was a politician from the subcontinent. She pursued politics at a time when Muslim women of sub-continent were restricted to their homes. She accompanied her husband to London to attend the Round Table Conference in 1930. Owing to the abilities of Amjadi Bano Begum, Quaid e Azam appointed her as a member of working committee of Pakistan Muslim league, being the only woman among the 25 members of the committee. In 1938, the All-India Muslim League organised a women's central sub-committee, and she presided over the first annual session of the committee in 1940. She became the first woman to second the Pakistan Resolution. Amjadi Begum died on 28 March 1947.
17. **Tipu Sultan** (1750 – 1799) was the ruler of the Kingdom of Mysore from 1782 to 1799. The eldest son of Sultan Hyder Ali of Mysore, he was also a scholar and a poet. He introduced several new laws, including new coinage, a new lunisolar calendar and a new land revenue system. He started the growth of the silk industry in Mysore. He fought

against the British for Mysore's independence, with help from the French. He won the first and Second Anglo-Mysore Wars, and dictated terms to the British in the subsequent Treaties of Madras and Mangalore respectively.

**Malala Yousafzai** is a Pakistani activist for female education. She has been a strong advocate for the education of women and children in her native Swat Valley in Khyber Pakhtunkhwa, where the Taliban had at times banned girls from attending school. Her advocacy has grown into an international movement. She is the second Nobel laureate in Pakistan's history, winning the 2014 Nobel Peace Prize along with Kailash Satyarthi of India. Aged 17 at the time, she was the youngest-ever Nobel Prize laureate.

9. **Faiz Ahmad Faiz** (1911 – 1984) was a Pakistani poet, and author in Urdu and Punjabi language. He was one of the most celebrated writers of the Urdu language in Pakistan. Faiz was nominated for the Nobel Prize in Literature and won the Lenin Peace Prize in 1962.

20. **Waris Shah** was a Punjabi Sufi poet of the Chishti order. He spent much of his in the village of Malka Hans, 12 kilometres north of Pakpattan, and was laid to rest in his hometown of Jandiala Sher Khan, 14km from Sheikhupura. There, in the month of Zul-Hijjah, thousands of devotees arrive to attend his urs.

21. **Ishrat Hussain Usmani** was an atomic physicist from Pakistan. He chaired the Pakistan Atomic Energy Commission (PAEC) from 1960 to 1971 as well as overseeing the establishment of the Space Research Commission. His career was mostly spent in the Government of Pakistan as an public policy official where he pushed for peaceful and commercial usage of the nuclear energy, and later working on arms control with Ministry of Defense to become a party of Partial Test Ban Treaty in 1963 before joining the International Atomic Energy Agency (IAEA) as its Chair of its Board of Governors. Usmani oversaw the nuclear power generation in Pakistan, working towards commissioning the nuclear power grid station in Karachi, and strengthened the role of the atomic energy commission at the United Nations.

22. **Subedar Abdul Khaliq**, also known as 'The flying bird of Asia', was a Pakistan sprinter. He received world-wide renown and was among the top athletes of his time. He won 100 gold medals in the national games, 26 gold medals and 23 silver medals in international games. He competed in 100m, 200m and 4×100 metres relay races. He participated in the Olympics of 1956 and 1960, and the Asian Games of 1954 and 1958. During 1954 Asian Games, Khaliq set a new record of 10.6 seconds in a 100 meters race by beating the previous record of 10.8 seconds held by Lavy Pinto of India.

23. **Shaiza Said Khan** is a former female cricketer from Pakistan who was the first captain of Pakistan women's cricket team. She and her sister, Sharmeen Khan, are known as the pioneers of women's cricket in Pakistan. She holds the world record for most wickets in a Test, which she achieved against West Indies in 2004 in Karachi.

24. **Syeda Tahira Safdar** is a Pakistani jurist who served as the Chief Justice of Balochistan High Court. She is the first female chief justice of any court in the history of Pakistan.

25. **Mast Tawakali** was a famous Sufi poet from Balochistan.

26. **Sardar Muhammad Iqbal** was the first federal ombudsman of Pakistan.

27. **Alam Lohar** was a Punjabi folk music singer from Pakistan. He is credited with creating and popularizing the musical term Jugni.

28. **Abdur Rahman Chughtai** was a prominent painter and intellectual from Pakistan.

29. **Sana Mir** is a former Pakistani cricketer who served as captain of the Pakistan national women's cricket team in ODIs and T20Is. She played in 226 international matches, including 137 of those as captain of the side. She was the first bowler for Pakistan to take 100 wickets in WODIs.

30. **Shahbaz Ahmad** is a former hockey player from Pakistan, popularly known by his nickname as "Shahbaz Ahmed Senior". He was famously known as the 'Maradona of Hockey'.

31. **Marium Mukhtiar** was a Pakistani fighter pilot, who became the first female Pakistani fighter pilot to achieve martyrdom, when her aircraft crashed near Kundian, northwestern Punjab, on November 24, 2015.

32. **Rahat Fateh Ali** is singer from Pakistan, mostly of the Qawwali genre. He is the grandson of the world-renowned Pakistani singer Nusrat Fateh Ali Khan. In 2014, Rahat became the first Pakistani to perform at any Nobel Prize concert, when he was invited to the concert at 2014 Nobel Peace Prize ceremony. He performed Nusrat Fateh Ali Khan's "Tumhe Dillagi" and "Mast Qalandar", and he also "Aao Parhao".

33. **Abdul Jabbar Khan** was the elder brother of Khan Abdul Ghaffar Khan. He was a prominent political figure and an efficient administrator from N.W.F.P. He became the first Chief-Minister of West Pakistan after the proclamation of One Unit formula.

34. **Syed Sadequain Ahmed Naqvi** was a Pakistani artist, best known for his skills as a calligrapher and a painter. He is considered as one of the finest painters and calligraphers Pakistan has ever produced.

35. **Syed Ameer Ali** (1849–1928) was a jurist hailing from Oudh. He was a signatory to the 1906 Petition to the Viceroy and was a founding-member of the All India Muslim League. He founded the political organization, Central National Muhammedan Association, in Calcutta in 1877.

36. **Sher Shah Suri** was a famous leader and the founder of the Suri Empire. In 1540, Suri took over the Mughal Empire. He has many remarkable achievements to his name - he is most famous for extending the Grand Trunk Road from Chittagong in Bengal in northeast India to Kabul in Afghanistan. He was the one who introduced the currency of rupee. He never lost a battle in the seven years of his reign. He was referred to as 'Ustad-i-Badshahan' (teacher of kings) by his foe, Humayun. He died an accidental death in 1545, and his son Islam Shah became his successor.

37. **Muhammad Ashraf Tai** is a legendary, grand master level, martial arts expert from Pakistan. He is a Black Belt in the sports, and has two times been crowned the Afro-Asian Martial Arts Champion. In addition to his success at the international stage, he has also won the Pakistan Karate

Championship nine times. He is a direct descendant of Hatim Tai, the Arabian poet famous for his generosity.

38. **Samina Baig** is a famous mountaineer from Pakistan. She is the first Pakistani woman to climb the Mount Everest (a feat she achieved in 2013), and the Seven Summits (which she achieved by 2014).
39. **Muhammad Ali Sadpara** was a mountaineer from Pakistan. He has many famous milestones to his name. He was part of the team that, in 2016, accomplished the first ever winter ascent of Nanga Parbat. He is the first Pakistani to climb seven out of the fourteen 8000 meter peaks in the world. Him, along with his son Sajid Sadpara, John Snorri Sigurjónsson from Iceland, and Pablo Prieto from Chile, set out to climb K-2 in February 2021. During the climb, Sajid Sadpara was forced to return to a malfunction in his oxygen regulator, but the other three mountaineers carried on. On 5th of February, Sadpara, Sigurjónsson and Prieto were declared missing and a search operation was initiated by Pakistani authorities. On 18th of February, the three mountaineers were announced as presumed dead by the Pakistani authorities.
40. **Naseem Hameed** is a Pakistani athlete. She received wide renown and acclaim when she became the fastest woman in South Asia, after winning the gold medal in the 100 metres race at the at the South Asian Games in Dhaka, 2010.
41. **Abdul Sattar Edhi** was a legendary humanitarian from Pakistan, who worked for the uplift of the downtrodden in society. He established the Edhi Foundation, which ran various homeless shelters, rehabilitation centers, orphanages, animal shelters etc. throughout Pakistan. The ambulance service which the Edhi Foundation runs, was named as the largest ambulance service in the world by Guieness Book of World Records. In addition to his humanitarian efforts in Pakistan, Edhi Foundation has centers in other countries as well, such as the US, UK, Japan, etc., and has extended relief efforts to other countries in times of disasters, such as the 1992 Cairo Earthquake or Hurricane Katrina in 2005.
42. **Sharmeen Obaid Chinoy** is a world-renowned Pakistani film-maker. She is best known for her documentary films, which mostly highlight the plight of women. In 2012, she became the first ever Pakistani to win an Academy (Oscar) Award for her documentary 'Saving Face'. She won another Academy Award in 2016 for 'A Girl in the River'.
43. **Arfa Karim** was computer science prodigy from Pakistan. In 2004, at nine years of age, she became the youngest ever Microsoft Certified Professional, and was named in the Guinness Book of World Records. She passed away in 2012 at just 16 years of age due to cardiac arrest.
44. **Anita Karim** is the first ever international female Mixed Martial Arts (MMA) fighter from Pakistan. She has won many national and international MMA fights, and is the co-founder of 'Fight Fortress', the first ever MMA training institute in Pakistan.
45. **Nawab Akbar Khan Bugti** was a former head of the Bugti tribe from Balochistan. He held important positions within the government of Pakistan, such as the Interior Minister of Pakistan and Governor Balochistan as well as Chief Minister of Balochistan. He went underground in 2005, joining militants who were waging a war against the state. In August 2006, he was killed in an operation in the Taratani area of Kohlu district in Balochistan.
46. **Asrar Ahmad**, more widely known by his pen name Ibn-e-Safi, was an Urdu fiction writer from Pakistan. His work mostly focused on the spy genre, with popular book series such as the Jasoosi Dunya (125 books), and Imran Series (120 books). Famous media personalities such as the Indian film writer Javed Akhtar have openly expressed their admiration for Ibn-e-Safi and his influence on their works.
47. **Nusrat Fateh Ali Khan** was a Pakistani Sufi singer of the qawwali genre. He is regarded as the greatest Urdu qawwali singer and one of the most famous musicians from South Asia. He is referred to as 'Shehen shah e Qawwali'
48. **Saadat Hassan Manto** was an Urdu fiction writer from Pakistan. His short stories and novels are held in high regard, and are well-known for bringing to light the hard truths of society. Due to his fame in the subcontinent, two biopics have been made about him, one in Pakistan in 2015, and the other in India in 2018.
49. **Mehdi Hasan** was a famous ghazal singer from Pakistan. He is widely regarded as the greatest ghazal singer, having influenced many contemporary singers from both India and Pakistan, from a wide range of genres. He created and sang songs for many Pakistani films, and won numerous national and international accolades.
50. **Dr. Ruth Pfau** was a German-Pakistani physician who moved to Pakistan in 1961, and dedicated her life to treating leprosy in Pakistan. She spent more than five decades of her life in Pakistan, serving those that suffered from leprosy, and opened many clinics for this purpose. Dr. Pfau won many awards and accolades both within Pakistan and internationally as well. She passed away in 2017.
51. **Dr. Abdus Salam** was a Pakistani physicist. He was the first ever Nobel laureate of Pakistan, winning the prize in 1979 alongside Sheldon Glashow and Steven Weinberg for their contribution to the electroweak unification theory. He was also only the second person to win a Nobel Prize from an Islamic country. He received his PhD from the University of Cambridge.
52. **Dr. Abdul Qadeer Khan** is a Pakistani physicist who is a key figure in Pakistan's nuclear weapons program.
53. **Asma Jahangir** was a human rights lawyer from Pakistan. She was well-known for her social activism, and was the co-founder of the Human Rights Commission of Pakistan.
54. **Wasim Akram** was a former Pakistani fast bowler. He is widely regarded as the greatest left-arm pacer, and one of the greatest bowlers of all time in Cricket.
55. **Ismail Gulgee** was a Pakistani painter and sculptor, mostly known for his calligraphic abstractions. His work is displayed in international museums such as The Metropolitan Museum of Art in New York. He and his wife were tragically murdered in their house in Karachi on the 16th of December, 2007.
56. **Aleem Dar** is an international umpire from Pakistan, and a member of the ICC Elite Panel of Umpires. He has officiated the most number of international matches as an umpire, and also holds the record for officiating in the most number of ODIs and Tests. The record for the most number of

officiated matches in T20Is is held by another Pakistani umpire, Ahsan Raza.

57. **Aisam-ul-Haq Qureshi** is a tennis player from Pakistan. He is the country's most successful tennis player ever, and has won many national and international accolades. He is primarily known for his success in the doubles matches, in which he reached a career highest ranking of 8th in the world in 2011. He is the only Pakistani to reach the finals of a Grand Slam, which he did in the 2010 US Opens when he reached the finals of both the Men's doubles and the Mixed Doubles.

58. **Ahmad Mirza Jamil** was a Pakistani artist. He gained wide acclaim and praise for his work as a calligrapher. He is most famous for creating the Noori form of Nastaleeq (a major calligraphic hand used in the writing of Persian script). He created the Noori Nastaleeq font in the year 1981.

59. **Imran Ahmad Khan Niazi**, popularly known as Imran Khan, is the current and 22nd Prime Minister of Pakistan. He gained widespread popularity in the country for his remarkable cricketing career, in which he became the best captain, and arguably the best player the country has ever produced. He became the only captain to win an ICC Cricket World Cup for team Pakistan, a feat he accomplished in 1992. In addition to his success in the cricketing arena, he is also the founder of many social organizations, such as the Shaukat Khanum Memorial Cancer Hospitals, a series of hospitals offering financially supported treatment to around 75% of its patients. He also founded the Namal Institute in his hometown of Mianwali. Imran Khan formed the political party Pakistan Tehreek-i-Insaaf in 1996, which came to power as the ruling government in the most recently concluded general elections in Pakistan, in 2018.

60. **Nawaz Sharif** is a Pakistani politician who has served as the Prime Minister of Pakistan for three non-consecutive terms, from 1990-93, 1997-1999, and 2013-2017, the most by any Pakistani politician.

61. **Zulfikar Ali Bhutto** was a Pakistani politician who held many important political positions in the Pakistani state, including that of the Foreign Minister, the President, as well as the Prime Minister. He was also the founder of the Pakistan Peoples Party. He is one of the most well-known political and historical figures in Pakistan's history, having been involved in numerous important events. His death is a subject of controversy to date, in which he was tried and executed by the Supreme Court of Pakistan for the murder of a political opponent, in 1979.

62. **Benazir Bhutto** was a Pakistani politician who served as the Prime Minister of Pakistan from 1988-1990 and from 1993-1996. She is one of the most famous personnel in Pakistan's political history, as she was the first ever head of state from a Muslim country. She was assassinated on the 27th of December 2007, in a PPP rally held at Liaquat National Bagh, Rawalpindi.

63. **Kiran Khan** (OLY) is an international, Olympic-level swimmer from Pakistan. She's one of the first Pakistani female swimmers to make a mark on the international stage. She has won more than 300 national gold medals, as well as around 50 medals internationally. She won the Tamgha-e-Imtiaz in 2012.

# ISLAMIC STUDIES NOTES

## Fundamentals of Islam

1. Monotheism (Belief in Oneness of God)
2. Salat
3. Fasting
4. Alms (Zakat)
5. Hajj

## Fundamentals of Faith

1. Monotheism
2. Prophethood
3. Qiyamah

## The Holy Divine Books

| | | |
|---|---|---|
| 1. | The Torah | It was revealed on Hazrat Musa (AS). |
| 2. | The Zabur | It was revealed on Hazrat Dawood (AS). |
| 3. | The Injeel | It was revealed on Hazrat Isa (AS). |
| 4. | The Holy Quran | It was revealed on Hazrat Muhammad (SAW). |

## Sources of Islamic Shariah

1. The Holy Quran
2. The Hadith
3. Ijma
4. Qiyas

## Eminent Islamic Jurists

1. Imam Abu Hanifa
2. Imam Malik
3. Imam Shafi
4. Imam Ahmad bin Hanbal

## Seerat:

The 1st foster mother of the holy Prophet S.A.W was **Thuwaybah**. She was servent of Abu Lahab. He freed her when she informed him about the birth of his nephew "Hazrat Muhammad" S.A.W

2nd foster mother of the holy Prophet S.A.W was **Haleema Sadiaa**.

### Haleema Sadiaa:

- Her full name was Haleema bint Abi Dhuayb
- Her husband's name was al-Harith bin Abdul Uzza
- She and her husband belonged to the tribe of Banu Saad, subdivision of Hawazin
- Holy Prophet lived with Hazrat Haleema for approximately 6 years.
- Hazrat Haleema had 1 son, named Abdullah and three daughters, Uneysa, Hudhafa, Shaemaa

### Uncles of the Holy Prophet S.A.W:

Prophet S.A.W had 11 Uncles, and two of them "Hazrat Hamza" and "Hazrat Abbas" had embraced Islam.

### Aunts of Holy Prophet:

Prophet S.A.W had 6 aunts, and one of them "Hazrat Safiya" had embraced Islam.

When holy Prophet S.A.W was 6 years old, his mother "Aamna" passed away and when he was 8 years old, his grandfather Abdul Muttalib passed away.

His uncle Abu Talib died in 9th year after the prophethood. Hazrat Khadija (wife of the Holy Prophet also passed away the same year.

### Children of the Holy Prophet S.A.W:

- Holy Prophet S.A.W had four daughters.
- Their names are "Zainab", "Ruqayyah", "Umm Kulthum", and "Fatimah".
- Holy Prophet S.A.W had three Sons.
- Their names are "Qasim", "Abdullah", and "Ibrahim".

### First Revelation:

The Holy Prophet S.A.W used to visit a small cave of Hira in Mountain Noor, located near to Makkah. At the age of 40, He (S.A.W) received the first Revelation from Allah SWT. Hazrat Gabriel carried the first revelation to him.

In the book Hadith "Sahih Bukhari", events of first revelation were narrated as follows:

"The angel came to him and asked him to read. The Prophet replied 'I do not know how to read'. The Prophet added, 'The angel caught me (forcibly) and pressed me so hard that I could not bear it any more. He then released me and again asked me to read and I replied, "I do not know how to read". Thereupon he caught me again and pressed me a second time till I could not bear it any more. He then released me and again asked me to read, but again I replied, "I do not know how to read" (or what shall I read?). Thereupon he caught me for the third time and pressed me, and then released me and said: "Read, in the name of Your Lord, who created, created man from a clot. Read! And Your Lord is the most bountiful" ...

- Holy Prophet S.A.W migrated form Makkah to Madina at the age of 53

### Hazrat Anas bin Maalik R.A:

Hazrat Anas was born 10 years before the Hijrah of Rasulullah SAW to the Bani Khazraj tribe of Madinah. He was present in Madinah during Rasulullah's time there and afterwards. He also gained fame as "the Servant of the Prophet," since he was a close personal attendant to the Messenger of God (S.A.W) for around ten years.

Hazrat Anas ibn Malik, was the last of the sahaba to die at the city of al-Basrah in 93 AH aged 103. So he is considered to be the longest living of the companions of Holy Prophet S.A.W

### Zayd ibn Haritha:

Hazrat Zayd was adopted by the Prophet S.A.W.

Hazrat Zayd was a slave. He was purchased by Hakim Bin Hizam, who gave the young slave as a present to his

Hazrat Khadijah bint Khuwaylid. He remained in her possession until the day she married Holy Prophet S.A.W. Then she gave the slave as a wedding present to her bridegroom. Holy Prophet S.A.W finally freed him and adopted him.

**Horses and camels of the Holy Prophet S.A.W:**
The Holy Prophet had two camels, "al-Qaswaa" and "al-Adbaa", 10 horses, one donkey, three mules and two goats.

**Weapons possessed by the Holy Prophet S.A.W:**
Holy prophet S.A.W had nine swords, seven armours and five spears.

- After the prophethood Holy Prophet S.A.W lived in Makkah for 13 years and 10 years in Madinah

## Travels:

**First trip to Syria:**
The holy Prophet's first trip to Syria was when he was twelve years old. His uncle Abu Talib had to go with a caravan to Syria for business. Abu Talib took him to Syria. When their caravan reached Busra, a christian monk whose name was Bahira saw the holy Prophet and recognized him as the last prophet. He told Abu Talib that his nephew would be a Prophet. He advised Abu Talib to take his nephew back to Makkah in regards to avoiding any harm.

**Second Trip to Syria:**
When the holy Prophet was 25, Khadija bint Khuwailed sent him on a business trip to Syria for her goods. She sent one of her servants, Maysarah, to assist him in trade.
After returning from the trip, Maysarah told that the Prophet had conducted his business, with the result that he earned them twice as much profit as expected.

**Visit of Taif:**
After the death of his uncle Abu Talib, the Holy Prophet visited Taif to the three prominent persons of Saqeef tribe "Abd Yalail", "Mas'ud" and "Habib". They refused to listen to him and ordered the children to throw stones and rocks at the holy Prophet S.A.W.
Hazrat Zayd ibn Harithah was accompanying the Holy Prophet in that visit. Both were wounded and bleeding when they left the city of Taif.

- Holy Prophet S.A.W lived in Makkah for 13 years after the prophethood, and migrated to the Madina when he was 53 (as per lunar calendar )
- He lived in Madina 10 years.
- Year of migration to Madina was 622 AD

**First Migration of Islam:**
5 years after the prophethood, First migration to Abyssinia happened. There were eleven men and four women among muslim migrants.

**Second Migration to Abyssinia:**
When this caravan reached Abyssinia, they heard that people of Makkah had embraced Islam. So some the migrants returned to Makkah. But the news was fake So they migrated to Abyssinia again, with more people. This time, migrants were more than 80.

## Companions of Holy Prophet:

**Martyrdom of Hazrat Umar ibn Khattab R.A:**
Hazrat Umar was attacked by the Persian slave Abu Lulu Firuz Nahavandi during the prayer of Fajr in al-Masjid al-Nabawi, on 23 Dhu al-Hijjah 23 AH.
Hazrat Umar died of wounds after three days on 26 Dhu al-Hijjah 23 AH.

**Martyrdom of Hazrat Ali ibn Abi Talib:**
Hazrat Ali was attacked by the Kharijite Abd-al-Rahman ibn Muljam during the prayer of Fajr in the great mosque of Kufa, on 19 Ramazan 40 AH.
Hazrat Ali died after two days on 21 Ramazan 40 AH.

**Martyrdom of Hazrat Usman ibn Affan:**
Hazrat Usman was assassinated by Egyption riotiors on 18 Dhu al-Hijjah 35 AH.

**Sahib-us-Sirr:**
Hazrat Hudhayfah ibn Yamaan R.A was titled as the Sahib-us-Sirr (Secret Keeper of the Prophet).
Holy Prophet S.A.W had told him the names of the hypocrites.

**Siddique:**
The holy Prophet called Hazrat Abu Bakr "Al-Siddiq" (the truthful) after he believed him in the event of Isra and Mi'raj while other people didn't.

**Farooq:**
Hazrat Umar R.A was called "Farooq" for his pious and just nature.

**Zun-Noorain:**
Hazrat Uthman earned the title of "Zun-Noorain" as he was married to the daughters of the holy Prophet S.A.W, 'Ruqayyah', and upon her death, married 'Umm Kulthum'.

**Abu-Turaab:**
Abu Turab (Father of Soil) was the title of Ali ibn Abi Talib. The holy Prophet S.A.W gave him this title when he found him sleeping while covered with soil.

**Adiyy ibn Hatim:**
Adiy ibn Hatim was the son of famous Arab personality "Hatim al-Tai", who was known for his generosity and chivalry.
He converted to Islam in 9 AH.

- Hazrat Khalid bin Waleed embraced Islam in 8 AH.

**Date of birth and death of four Caliphs:**
Hazrat Abu Bakr : 50 Before Hijra - 13 AH
Hazrat Umar ibn al-Khattab : 40 Before Hijra - 23 AH
Hazrat Usman ibn Affan : 47 Before Hijra - 35 AH
Hazrat Ali ibn Abi Taalib : 23 Before Hijra - 40 AH

## Personalities:

**Ibn e Sina:**
He was born in 980 AD, in Bukhara and died in 1037 AD, in Hamdan, Iran.
He is considered to be one of the most significant physicians, astronomers, and writers of the Islamic Golden Age of intellect.
He is also regarded as the father of early modern medicine.
His most famous books are "Kitab al-Shifaa" - The Book of Healing, a philosophical and scientific encyclopedia, and "al-

Qaanun fi al-Tib " - The Canon of Medicine, a medical encyclopedia

**Ibn e Khaldun:**

Abu Zayd Abdur Rahman Ibn Khaldun was born in Tunisia on 27 May 1332.
He was a philosopher, historian, sociologist and demographist.
In the early age, he received islamic education, memorized and studied the Quran,and learned Arabic linguistics. Then he read the works of Averroes, Avicenna, Razi and Tusi.
He also worked with Tunisian ruler as "Katib", and wrote introductory notes of official documents.
He worked as a minister for African sultan Abu Abdallah before 1366.
He spent his last years in Cairo, Egypt, where he completed his autobiography.
He died on 17 March 1406 in Cairo.
Some of his important written works are "Muqaddima", "Lubabul Muhassal", and "Tarikh".

**Ibn e Rushd ( Averroes):**

Ibn Rushd was born in Cordova, Spain on 14 April 1126. His family was known for legal and public service. His grandfather, Abdul-Walid Muhammad (d. 1126), was the chief judge of Cordova, Spain under the Almoravid dynasty. Abdul-Wahid was considered as a specialist in legal methodology. Ibn Rushd's father, Abdul-Qasim Ahmad was in the same position until the Almohad got the rule in 1146.
Ibn Rushd's got the traditional education beginning with studies in hadith, linguistics, jurisprudence and scholastic theology. He got his medical education from Abu Jafar ibn Harun.
Ibn Rushd traveled to Marrakesh and worked for the caliph 'Abd al-Mu'min, to reform the educational system.
One of the prominent skills that Ibn Rush was gifted with, was his ability to unite philosophy and religion. Sometime between 1159 and 1169, during one of his periods of residence in Marrakesh, Ibn Rushd made the bond with Ibn Tufayl , who was a philosopher and counselor to Caliph Abu Yaqub Yusuf, son of 'Abd al-Mu'min. Ibn Tufayl introduced Ibn Rushd to the Abd al-Mumin. The prince was impressed by the young philosopher and his knowledge. He employed him as chief judge and later promoted him as chief physician. Moreover, Prince commissioned Ibn Rushd to write a series of commentaries on Aristotle's work.
Unfortunately, public pressure against liberalizing tendencies in the government led to the formal rejection of Ibn Rushd and abandoning his writings in 1195. He was exiled to Lucena, a village outside of Cordoba. His writings were banned and his books burnt. Ibn Rushd returned to Cordoba two years later, but died the following year on 11 December 1198.

**Al-Khwarizmi:**

Muhammad ibn Musa al-Khwarizmi was born in 780 AD in Khwarezm, a city in central asia.
He was a persian scientist, astronomer and mathematician.
His works introduced Hindu-Arabic numerals and the concepts of algebra into European mathematics. The term Algorithm is a latinized by his name Al-Khwarizmi, and the term Algebra is extracted from his book "Algebr wal Muqabala".
Al-Khwārizmī lived in Baghdad and worked at the "House of Wisdom" (Bait al-Hikma) under the caliphate of al-Ma'mun al-Rashid.
There, he wrote his famous book Al-Kitāb al-mukhtaṣar fī ḥisāb al-jabr wa'l-muqābala ("The Compendious Book on Calculation by Completion and Balancing"). It was translated into Latin in the 12th century, from which the term algebra was derived.
Al-Khwārizmī also compiled a set of astronomical tables based on the Hindu and Greek sources. This astronomical work was translated into Latin.
Al-Khwarezmi passed away in Baghdad in 850 AD at the age of 70.

**Jaber ibn Hayyan:**

Abu Musa Jabir Ibn Hayyan Al-Azdi was born in the city of Tus in the province of Khorasan in Iran in 721 AD. In Europe he is famous as Geber. He belongs to the tribe "Azd" from Yemen. is considered the father of Arab chemistry and one of the founders of modern pharmacy.
His father Hayyan Al-Azdi was an "Attar" (druggist or pharmacist) Hayyan was a supporter of the Abbasids against the Umayyads, so he moved to Iran where Jaber was born. His family migrated to Yemen after Hayyan was caught and executed by the Umayyad soldiers. Jabir studied in Yemen. He returned back to Kufa after the Abbasids dynasty got the ruling.
He learned chemistry (alchemy), pharmacy, philosophy, astronomy, and medicine in Kufa. He became the alchemist during the reign of Caliph Haroun Al-Rashid. He also worked as a physician for his grand minister Jaffer Barmakid. He died at the age of 94 in 815 AD in Kufa.

## The Holy Quran

| | |
|---|---|
| ★ Total Paras | 30 |
| ★ Total surahs | 114 |
| ★ Total rakus | 540 |
| ★ Total verses | 6666 |

★ Total period of revelation of the Holy Quran 22 years 5 months 14 days

| | |
|---|---|
| ★ Total recitational bows | 14 |
| ★ Total manzils | 7 |
| ★ The first surah in Quran | Fatiah |
| ★ The last surah | Al-Nass |
| ★ The longest surah | Al-Baqara |
| ★ The shortest surah | Al-Kasuar |

## Makki and Madani verses:

- If a verse was revealed in Makkah and along the way, before the migration to Madinah , it is considered a Makki verse, whether it is revealed in the city of Makkar or not.
- If it was revealed after the migration to Madinah, it is considered Madani verse, whether it is revealed in the city of Madina or not

## Ayaat-ul-Ahkaam:

Ayaat -ul- Ahkaam are Qur'anic verses from which practical rulings of the Islamic Shari'a can be extracted.

## Verse of Ikmal al-Din:

Ayat Ikmal al-Din ( Perfection of Religion ) is the third verse of Surah Al-Maaidah, in which Allah says:
"Today I have perfected your faith for you, completed My favour upon you, and chosen Islam as your way."

## Important Note:

According to this methodology, the verses revealed at the Conquest of Makkah (8 A.H.) or at the Farewell Pilgrimage (10 A.H.) would be considered Madani, although they were revealed in Makkah.

## Compilation of Quran:

### First compilation:

During the time of Caliph Abu Bakr, 70 people who knew the Quran were killed in the Battle of Yamama. So Hazrat Abu Bakr formed a delegation under the leadership of Zaid ibn Thabit. This delegation included famous Sahabaas such as Uthman ibn Affan, Ali ibn Abi Talib, Talha ibn Ubaydullah, Abdullah ibn Masood, Ubayy ibn Kab, Khalid ibn al-Walid.

### Second Compilation:

In the caliphate of Hazrat Usman R.A Hazrat Huzyfa noticed that the conflict between muslims during the battle of Armenia upon different accents of the Quran articulation had begun. He warned Hazrat Usman about the seriousness of the matter. Hazrat Usman formed a committee to re-compile the Quran, in such a writing script that most of the accents can be read through it.

## Name of Sahabi in Quran:

- Hazrat Zayd ibn Harithah

## Name of animals in Quran:

| | |
|---|---|
| Ant | نمل |
| Ape | قرد |
| Bee | نحلة |
| Bird | طائر |
| Calf | عِجْل |
| Camel as | نَاقَةُ بَعِيرٍ جمل |
| Cattle | نَّعَم |
| Cow | بقرة |
| Crow | غُرَابًا |
| Dog | كلب |
| Donkey | حِمَار |
| Elephant | فِيلِ |
| Ewe | نَعْجَةٌ |
| Fish | حوت |
| Fly | ذباب |
| Frog | ضفدع |
| Goat | ماعز |
| Hoopoe | هُدْهُدَ |
| Horse | حصان خَيْلِ |
| Lice | قُمَّلَ |
| Lion | قَسْوَرَةٍ |
| Locust | جرادة |
| Mosquito | بعوضة |
| Moths | فَرَاش |
| Mule | بغل |
| Pig | خنزير |
| Quail | سلوى |
| Sheep | غَنَم |
| Snake | ثُعْبَانٌ |
| Spider | عنكبوت" |
| Wolf | ذئب |

## Some Important facts about Quran:

- Longest Surah is Surah Baqarah
- Shortest Surah is Surah al-Kawthar
- 29 surahs start with Huroof e Muqatteaat
- Surah Tawbah has no Bismillah
- Surah Naml has bismillah twice, once in the start and one in the middle of it.
- In the Quran, there are 14 verses of Sajda
- In Quraan, there are 7 stages

## 1. Some stories in the Quran:

- Habil and Qabil
- Harut and Marut
- The town that brought Allah's wrath upon itself
- Heifer
- Prophet Moses & Al-Khidr
- Qarun (Korah)
- Bilqis (Queen of Sheba)
- Saba
- Uzair
- Dhul-Qarnayn
- Gog and Magog
- People of the cave
- The believer & the disbeliever
- People of the garden
- Sabbath-breakers
- People of the ditch
- Barsisa the worshipper
- The owners of the elephant

## Surahs in Quran named after animals:

i. Al Baqarah (The Cow)
ii. Al Anaam (The Cattle)
iii. Al Nahl (The Bees)
iv. Al Naml (The Ants)
v. Al Ankabut (The Spider)
vi. Al Fil (The Elephant)

## Places (14) in Qur'an where Sujood/Prostration is made obligatory.

i. al-A'raaf 7:206
ii. al-Ra'd 13:15
iii. al-Nahl 16:49
iv. al-Isra' 17:107
v. Maryam 19:58
vi. al-Hajj 22:18
vii. al-Furqaan 25:60
viii. al-Naml 27:25
ix. al-Sajdah 32:15
x. Saad 38:24
xi. Fussilat 41:37
xii. al-Najm 53:62
xiii. al-Inshiqaaq 84:21
xiv al-'Alaq 96:19

## Meesaq-e-Medina

First written constitution of the world
Also known as Magna Carta. This was written during the first year after the migration to Medina in 623 CE. The Prophet (SAWW) saw that Medina had no semblance of any check or balance, so Misaq-e-Medina was written down to create a system of law and accountability.

### Titles of Prophets

Hazrat Adam (AS) = Safi Ullah and Abu al Bashar
Hazrat Ibrahim (AS) = Khalil Ullah
Hazrat Ismail (AS) = Zabih Ullah
Hazrat Musa (AS) = Kaleem Ullah
Hazrat Essa (AS) = Rooh Ullah

1. **"Ahmed"** in Quran mentioned once
   And it is mentioned in Surah Saff, verse 6. Ahmed is one of the names of the Prophet (SAWW). It means "grateful".
2. The first time the theft penalty in Islam was being implemented on someone, it was a companion of the Prophet (SAWW) named Fatima bint Al-Aswad.
3. **Ghazwas in Islam**

A ghazwa is any battle that the Prophet (SAWW) took part in.

## Battles:

List of the battles and expeditions

| | Battle | Date |
|---|---|---|
| 1 | Abwaa | 2 AH |
| 2 | Bawaat | 2 AH |
| 3 | Safwaan/ Badr I | 2 AH |
| 4 | Zil Ashirah | 2 AH |
| 5 | Badr | 2 AH |
| 6 | Bani Qaynuqa'a | 2 AH |
| 7 | Sawiq | 2 AH |
| 8 | Bani Sulym | 2 AH |
| 9 | Ghitfan | 3 AH |
| 10 | Uhud | 3 AH |
| 11 | Hamraa | 3 AH |
| 12 | Bani Nazir | 4 AH |
| 13 | Badr III | 4 AH |
| 14 | Dawmatel Jandad | 5 AH |
| 15 | Bani Mustaliq | 5 AH |
| 16 | Ahzab | 5 AH |
| 17 | Bani Quryza | 5 AH |
| 18 | Bani Lehyan | 6 AH |
| 19 | Zi Qirad | 6 AH |
| 20 | Hudybeyah | 6 AH |
| 21 | Khybar | 7 AH |
| 22 | Wadel Qura | 7 AH |
| 23 | Zat al-Reqa | 7 AH |
| 24 | Conquest of Makka | 8 AH |
| 25 | Hunyn | 8 AH |
| 26 | Taaif | 8 AH |
| 27 | Tabuk | 9 AH |

### Martyrdom of Hazrat Zaid, Jaffer and Abdullah bin Rawaha in battle of Mutah:

Hazrat Abdudullah bin Umar R.A narrated:
"Allah's Messenger (S.A.W.) appointed Zaid bin Haritha as the commander of the army during the Ghazwa of Mu'tah and said, "If Zaid is martyred, Jafar ibn Abi Talib should take over his position, and if Jafar is martyred, Abdullah bin Rawaha should take over his position.'"

### Martyrdom of Hazrat Hamza R.A:

Hazrat Hamza R.A was martyred in battle of Uhud 3 AH.

### Battle of Badr:

- Muslims were 313 , with 70 camels and 2 horses
- Disbelivers were 1000, with more than 70 horses

Muslims martyred in Badr : 14
Disbelievers killed in Badr : 70
Made prison of war: 70

### Battle of Uhud:

- Muslims were 700 , ( initial strength was 1000, but Abdullah ibn Ubaey withdrew his 300 men before battle )
- Disbelivers were 3000, 3000 camels

### Battle of Yarmuk:

The Battle of Yarmuk was fought in 15 AH between Muslims and the Byzantine forces. Muslim forces were led by Khalid ibn al-Walid and Byzantines were led by emperor Heraclius . Muslims won the battle of Yarmuk. Byzantine withdrew from Syria and Palestine. Jerusalem was also surrendered to the Muslims in 638. This is considered one of the most peaceful conquests in Jerusalem's history.

### Battle of Qadisiyyah:

The Battle of Qadisiyyah was fought in 15 AH between Muslims and the Persian Sasanian forces. Muslim forces were led by Saad ibn Abi Waqqas and Sasanians were led by Rostam Farrokhzad . Muslims won the battle of Qadisiyyah and gained a large number of spoils including the famous standard ( military flag ) with royals jewel encrusted in it.

**Ghazwa-e-Badr** (The Day of Criterion/Youm-al-Furqan)
Date: 13 March 624 CE
Battle between Quraysh army led by Abu Jahl and the Muslim army led by the Prophet (SAWW). It was the first battle of Islam on a large scale. This battle started a six-year war between Muslims and Quraysh.

### Ghazwa-e-Uhud

Date: 23 March 625 CE
Abu Sufyan led an army of 3000 towards Medinah where the Prophet (SAWW) and the Muslims were residing. Muslims could not defeat the Quraysh because of the genius of Khalid bin Waleed.

**Ghazwa-e-Khandaq** (Battle of the Confederates/Battle of Trench)
Date: March 627 AD – April 627 AD
This battle was 27 days long and was between the Muslims and the Jews. Muslims had only 3000 men while the Jews had some 10,000 men, 600 horses and camels. But due to the idea of Hazrat Salman Farsi the Muslims dug out a trench to solidify their fortifications and hence, remained victorious.

### Ghazwa-e-Khyber

Date: 628 AD
This battle was fought between Muslims and Jews at the oasis of Khyber which is 150 km away from Medina. Muslims were victorious in this battle.

### Ghazwa-e-Mu'ta

Date: September 629 CE
This battle was fought at Jordan between the Muslims and the soldiers from Byzantine Empire and the Arab Christians. After facing pressure and almost getting defeated by the enemies, Khalid bin Waleed stepped in and the Muslims were victorious in this battle.

### Ghazwa-e-Hunayn

Date: 630 CE

This battle is the only one mentioned by name in the Qur'an in Surah Tawbah. Muslims fought this one against the tribe of Hawazin and the Thaqifs. Muslims had won this battle.

## Importance of Jerusalem

For Muslims four Prophets of Islam were associated with Jerusalem (Abraham, David, Solomon, and Jesus); along with this, Jerusalem housed the first Qibla (direction of Muslim prayer) which is Mosque Al-Aqsa.
For Christians the place where Jesus Christ preached Christianity, where he died and where he was resurrected; it is also believed that Jesus's Second Coming will be at Jerusalem.
For Jews Jews have been living there since 10th CE and it has become a spiritual home for them; also in Jewish religion this was the place where God resided.

## Facts about Prophets

- Hazrat Suleyman could speak to birds, animals and jinns.
- Hazrat Ibrahim His people received the calamity of mosquitoes.

2. **Makki and Madani Surahs**

There are 28 Madani Surahs and 86 Makki Surahs. Madani surahs were revealed to the Prophet (SAW) after his Hijrah (emigration) from Mecca to Madinah in 622. Likewise, Makki surahs were revealed to the Prophet (SAW) during his time at Mecca.

## Madani Surahs

- Al-Baqarah (Madni)
- Ali 'Imran (Madni)
- An-Nisa (Madni)
- Al-Ma'idah (Madni)
- Al-Anfal (Madni)
- At-Tawbah (Madni)
- Ar-Ra'd (Madni)
- Al-Hajj (Madni)
- An-Nur (Madni)
- Surah Muhammad (Madni)
- Surah Al-Fath (Madni)
- Surah Al-Hujurat (Madni)
- Surah Al-Rahman (Madni)
- Surah Al-Hadid (Madni)
- Surah Al-Mujadila (Madni)
- Surah Al-Hashr (Madni)
- Surah Al-Mumtahana (Madni)
- Surah As-Saff (Madni)
- Surah Al-Jumu'ah (Madni)
- Surah Al-Munafiqun (Madni)
- Surah At-Tagabun (Madni)
- Surah At-Talaq (Madni)
- Surah At-Tahrim (Madni)
- Surah Ad-Dahr (Madni)
- Surah Al-Baiyina (Madni)
- Surah Al-Zalzalah (Madni)
- Surah An-Nasr (Madni)

## Makki Surahs

- Al-Fatiha (Makki)
- Al-An'am (Makki)
- Al-Araf (Makki)
- Yunus (Makki)
- Hud (Makki)
- Yusuf (Makki)
- Ibrahim (Makki)
- Al-Hijr (Makki)
- An-Nahl (Makki)
- Al-Israa (Makki)
- Al-Kahf (Makki)
- Maryam (Makki)
- Taha (Makki)
- Al-Anbya (Makki)
- Al-Mu'minun (Makki)
- Al-Furqan (Makki)
- Surah Ash-Shuara (Makki)
- Surah An-Naml (Makki)
- Surah Al-Qasas (Makki)
- Surah Al-Ankabut (Makki)
- Surah Ar-Rum (Makki)
- Surah Luqman (Makki)
- Surah As-Sajdah (Makki)
- Surah Al-Ahzab (Madani)
- Surah Saba (Makki)
- Surah Fatir (Makki)
- Surah Yasin (Makki)
- Surah As-Saffat (Makki)
- Surah Sad (Makki)
- Surah Az-Zumar (Makki)
- Surah Al-Mumin (Makki)
- Surah Ha-Mim (Makki)
- Surah Ash-Shura (Makki)
- Surah Az-Zukhruf (Makki)
- Surah Ad-Dukhan (Makki)
- Surah Al-Jathiya (Makki)
- Surah Al-Ahqaf (Makki)
- Surah Qaaf (Makki)
- Surah Az-Zariyat (Makki)
- Surah At-Tur (Makki)
- Surah An-Najm (Makki)
- Surah Al-Qamar (Makki)
- Surah Al-Waqi'a (Makki)
- Surah Al-Mulk (Makki)
- Surah Al-Qalam (Makki)
- Surah Al-Haqqa (Makki)
- Surah Al-Ma'arij (Makki)
- Surah Noah (Makki)
- Surah Al-Jinn (Makki)
- Surah Al-Muzzammil (Makki)
- Surah Al-Muddaththth (Makki)
- Surah Al-Qiyamah (Makki)
- Surah Al-Mursalat (Makki)
- Surah An-Nabaa (Makki)
- Surah An-Naziat (Makki)
- Surah Abasa (Makki)
- Surah At-Takwir (Makki)
- Surah Al-Infitar (Makki)
- Surah Al-Mutaffife (Makki)
- Surah Al-Inshiqaq (Makki)
- Surah Al-Buruj (Makki)
- Surah At-Tariq (Makki)
- Surah Al-Ala (Makki)
- Surah Al-Gashiya (Makki)
- Surah Al-Fajr (Makki)
- Surah Al-Balad (Makki)
- Surah Ash-Shams (Makki)
- Surah Al-Lail (Makki)
- Surah Adh-Dhuha (Makki)
- Surah Al-Sharh (Makki)
- Surah At Tin (Makki)
- Surah Al-Alaq (Makki)
- Surah Al-Qadr (Makki)
- Surah Al-Adiyat (Makki)

- Surah Al-Qaria (Makki)
- Surah At-Takathur (Makki)
- Surah Al-Asr (Makki)
- Surah Al-Humaza (Makki)
- Surah Al-Fil (Makki)
- Surah Quraish (Makki)
- Surah Al-Maun (Makki)
- Surah Kausar (Makki)
- Surah Al-Kafirun (Makki)
- Surah Al-Lahab (Makki)
- Surah Al-Ikhlas (Makki)
- Surah Al-Falaq (Makki)
- Surah An-Nas (Makki)

### Characteristics of Makki Surahs:

- Tawheed i.e. believing in the oneness of Allah;
- Believing in Judgement Day;
- Believing in good deeds and bad deeds, and the rewards and punishments for them, respectively;
- Believing in Heaven and Hell;
- Defining morality for a person;
- Defining virtues.

### Characteristics of Madani Surahs:

- These surahs lay out the social obligations and duties of Muslims;
- All the commandments relating to Jihad.

### First 10 Surahs of Quran:

i. Al-Fatihah (The Opener)
ii. Al-Baqarah (The Cow)
iii. Ali 'Imran (Family of Imran)
iv. An-Nisa (The Women)
v. Al-Maidah (The Table Spread)
vi. Al-An'am (The Cattle)
vii. Al-A'raf (The Heights)
viii. Al-Anfal (The Spoils of War)
ix. At-Tawbah (The Repentance)
x. Yunus (Jonah)

### Last 10 Surahs of Quran:

i. Al-Fil (The Elephant)
ii. Quraysh (Quraysh)
iii. Al-Ma'un (The Small Kindnesses)
iv. Al-Kawthar (The Abundance)
v. Al-Kafirun (The Disbelievers)
vi. An-Nasr (The Divine Support)
vii. Al-Masad (The Palm Fiber)
viii. Al-Ikhlas (The Sincerity)
ix. Al-Falaq (The Daybreak)
x. An-Nas (The Mankind)

The following names of the Prophets (AS) have appeared in the Holy Quran.

1. Hazrat Adam (AS)
2. Hazrat Noah (AS)
3. Hazrat Idress (AS)
4. Hazrat Hood (AS)
5. Hazrat Ibrahim (AS)
6. Hazrat Ismail (AS)
7. Hazrat Ishaq (AS)
8. Hazrat Loot (AS)
9. Hazrat Yaqub (AS)
10. Hazrat Yousaf (AS)
11. Hazrat Shoaib (AS)
12. Hazrat Musa (AS)
13. Hazrat Haroon (AS)
14. Hazrat Younas (AS)
15. Hazrat Saleh (AS)
16. Hazrat Dawood (AS)
17. Hazrat Suleman (AS)
18. Hazrat Ayub (AS)
19. Hazrat Ilyas (AS)
20. Hazrat Zikriya (AS)
21. Hazrat Yahya (AS)
22. Hazrat Zulkafal (AS)
23. HazratAziz (AS)
24. Hazrat Isa (AS)
25. Hazrat Muhammad (SAW)

### Surah in the Names of the Prophets

The Following six Surahs in the Holy Quran are in the name of the prophets.

1. Surah Yousaf
2. Surah Hood
3. Surah Younus
4. Surah Ibrahim
5. Surah Noah
6. Surah Muhammad

### Other Information

1. Bismillah has come 114 times in the Holy Quran.
2. Surah Tauba starts without Bismillah in the Holy Quran.
3. Bismillah has come two times in Surah Al-Nimal in the Holy Quran.
4. The name of Hazrat Musa (A.S) has come the most in the Holy Quran(126 times).
5. Zaid ibn Harith has been mentioned in Surah Ahzab in the Holy Quran.

## Hadith

The mentioning of commands by the Holy Prophet(SAW) and the deed performed by him is called Hadith.

## Sihah-e-Sitta

Six authenticated books of Hadith are called Sihah-e-Sitta. They are as mentioned below with the names of their compilers.

| Names of Hadith | Compiler |
|---|---|
| Sahih Bukhari | Imam Muhammad bin Ismail Bukhari. |
| Sahih Muslim | Imam Muslim bin Hajjaj ibn Muslim. |
| Jame Tirmizi | Imam Abu Isa Muhammad bin Isa. |
| Sunan Abu Daud | Imam Abu Daud Sulaiman bin Ash'at. |
| Sunan Al-Nisaiee | Imam Abu Addur Rehaman Ahmad bin Ali al-Nisaiee. |
| Sunah ibn Majah | Imam Abu bin Abdullah Muhammad bin Yazid bin Majah al-Kazdini. |

## Important Personalities in Islam

| | |
|---|---|
| Hazrat Adam (RA) | Man of Allah |
| Hazrat Dawood (RA) | Caliph of Allah |
| Hazrat Musa (RA) | Speaker of Allah |
| Hazrat Ibrahim (RA) | Friend of Allah |
| Hazrat Ismail (RA) | Sacrifice for Allah |
| Hazrat Abu Bakr (RA) | Most Siddique |
| Hazrat Umar (RA) | Farooq-e-Azam |
| Hazrat Usman (RA) | Zul Noorain |
| Hazrat Ali (RA) | Lion of Allah |

| | |
|---|---|
| Hazrat Ali (RA) | Door of Knowledge |
| Hazrat Amir Hamza (RA) | Leader of the Martyrs |
| Hazrat Khalid bin Walid (RA) | Sword of Allah |
| Hazrat Saeed bin Zaid (RA) | Sea of Knowledge |
| Hazrat Ayub Ansari (RA) | Host of the Holy Prophet (SAW) |
| Hazrat Bilal (RA) | Muazzan of the Holy Prophet (SAW) |
| Hazrat Hassan bin Sabat (RA) | Poet of the Holy Prophet(SAW) |

## Prayers:

**Obligatory Prayers:**

1. Fajar
2. Zuhr
3. Asar
4. Maghrib
5. Isha

## Eid Prayers:

Eid prayer is "Wajib", and it is performed along with six additional Takbeers.

## Janaza Prayer:

Salatul-Janaza ( funeral prayer ) is "Farz e Kifaya". It consists of 4 Takbeers. It doesn't have any Rukoo and Sajda.

- A Farz Kifaya (collective duty) is an act that is obligatory for the Muslim community collectively – if it is offered by some Muslims, then other Muslims do not have to do it; but if nobody performs the act on behalf of the community, then all the Muslims will have the punishment on the Day of Judgment.

## Eclipse Prayer:

Lunar Eclipse prayer is called "Salatul Khusoof" and Solar Eclipse prayer is known as "Salatul Kusoof".
Both prayers are offered as "Nafel", in the form of two Raka'at.

## Rate of Zakat

| | |
|---|---|
| Cash | 2 ½% |
| Gold, Silver and Ornaments | 2 ½% |
| Merchandise | 2 ½% |
| Forty goats and Sheep | One goat/sheep |
| Thirty cows /buffaloes | One goat/sheep |
| Five Camels | One goat/sheep |
| Gold | 87.48 grammes |
| Silver | 612.36 grammes |
| Crops | 948 Kg |
| Products of non-irrigated lands | 10%(Ushr) |
| Products of irrigated lands | 20%(Ushr) |

## Utilization of Zakat

The Surah Tauba in the Holy Quran has described the following eight categories, which can be given Zakat.

1. **The Poor**
   Such poor and helpless people having no means of life
2. **Masakeen**
   Such destitute people who have some means but not sufficient for their needs
3. **Aamleen Zakat**
   The persons collecting Zakat and taking it to the Baitul-Mal are also entitled to Zakat.
4. **Non Muslim Mualafat-ul-Quloob**
   Such non-Muslims who may convert to Islam if given monetary aid or the Muslims may be saved from their deeds.
5. **Slaves**
6. **Indebtors**
7. **In the way of Allah**
8. **Musaafars**

## Who is obliged to pay Zakat:

There are some conditions for obligation of Zakat.

1. A free man or woman: A slave does not have to pay zakat.
2. A Muslim. Zakat is a religious obligation upon Muslims, like daily prayers.
3. Sane: The person on whom zakat becomes obligatory must be of sound mind. Insane is not obliged to Zakat
4. An adult: Children do not have to pay zakat,
5. In complete ownership and control of their wealth:
6. In possession of wealth above the nisab threshold for Zakat
7. Free from debt
8. In possession of the wealth for one complete lunar (Hijrah) year

## Prohibitions for Payments of Zakat

The following persons are prohibited for payment of Zakat.

1. Healthy and strong persons.
2. Husband will not give Zakat to his wife.
3. Parents
4. Bani Hashim
5. Ushr:
6. a 10% amount on the harvests of irrigated land rain-watered land and 5% on Land dependent on well water.
7. Jizya:
8. a per person yearly amount obligated on certain non-Muslim subjects—zimmis—permanently residing in Muslim lands under Islamic law.

## Biography of the Holy Prophet (SAW)

| | |
|---|---|
| Birth | 571 A.D |
| Name of father | Hazrat Abdullah (RA) |
| Name of mother | Hazrat Amna (RA) |
| Name of grandfather | Hazrat Abdul Mutlab (RA) |
| Name of foster mother | Hazrat Halima (RA) |
| Name of first wife | Hazrat Khadija (RA) |

Names of the sons
- (i) Hazrat Qasim (RA)
- (ii) Hazrat Ibrahim (RA)
- (iii) Hazrat Abdullah (RA)

Names of the daughters
- (i) Hazrat Um-e-Kulsum (RA)
- (ii) Hazrat Zainab (RA)
- (iii) Hazrat Ruqayya (RA)
- (iv) Hazrat Fatima (RA)

## The Holy Prophet's Life at Makkah

| | |
|---|---|
| 606 A.D | Incident of placing Hijr-e-Aswad. |
| 610 A.D | Prophethood conferred. |
| 614 A.D | Migration to Abyssinia by some companions |
| 615 A.D | Hazrat Hamza and Hazrat Umar accepted Islam. |
| 616 A.D | Bani Hashim boycotted, confined to shaab-I-abi Talib. |
| 618 A.D | Boycott ended. |

| | |
|---|---|
| 619 A.D | Journey to Taif. Death of Abu Talib and Hazrat Khaldija, Miraj. |
| 621 A.D | Bait-e-Uqba I. |
| 622 A.D | Bait-e-Uqba II. |
| 623.A.D | Migration to Madina. Start of Hijri calendar. |

## The Holy Prophet's Life at Madina

| | |
|---|---|
| 1 A.H | Foundation of Masjid Nabawi. |
| 2 A.H | Start of Azan, Command for Zakat and Fasting, Salat facing Kaaba instead of Bait-ul-Muqaddas, battle of Badr. |
| 3 A.H | Battle of Uhud. |
| 4 A.H | Battle of Banu Nasir. |
| 5 A.H | Battle of Ahzab, Conquest of Banu Quraiza. |
| 6 A.H | Truce of Hudaibiyah, Hazrat Khalid accepted Islam. |
| 7 A.H | Battles of Khyber and Muta, letters to the kings. |
| 8 A.H | Conquest of Makkah, battle of Hunain and Taif, restriction on interest. |
| 9 A.H | Battle of Tabuk, Command for Hajj. |
| 10 A.H | Last sermon. |
| 11 A.H | Marz-ul-Maut, the last prayer. |

## First in Islam

★ The first among men who accepted Islam
Hazrat Abu Bakr (RA)

★ The first among women who accepted Islam
Hazrat Khadija (RA)

★ The first among children who accepted Islam
Hazrat Ali (RA)

★ The first companion to recite Kalima Islam aloud
Hazrat Abu Zar Ghafari (RA)

★ The first man martyr in Islam
Hazrat Haris bin Abi Hala (RA)

★ The first woman martyred in Islam
Hazrat Sumayyah (RA)

★ The first swordman companion in Islam
Hazrat Zubair bin Al-Awam (RA)

★ The first mosque of Islam
Masjid Kaaba

★ The first battle with Kafirs
Battle of Badr 2 A.H

★ The first migration in Islam
Abyssinia Migration

★ The first Mouzan of Islam
Hazrat Bilal (RA)

★ The first Eid-ul-Fiter in Islam
1st Shawal 2 A.H.

★ The First Eid-ul-Azaha in Islam
2 A.H

★ The first written constitution in the world
The Charter of Madina

## The Pious Caliphate

### → Hazrat Abu Bakr (R.A) (632 A.D. TO 634 A.D.)

| | |
|---|---|
| 632 A.D | The Muslims chose Hazrat Abu Bakr (RA) as their Caliph |
| 633 A.D | Eradication of Apostates |
| 634 A.D | Start of Islam victories. Hazrat Khalid bin Walid defeated Iranis at Kazmic Iraq. |
| 634 A.D | The Muslim armies defeated the Roman armies of the king Harqal in the battle of Ajnadeen. |
| 634 A.D | Death of Hazrat Abu Bakr |

### → Hazrat Umar Farooq (R.A) (634 A.D. TO 644 A.D.)

| | |
|---|---|
| 634 A.D | Hazrat Umar (RA) elected as Caliph of Muslims |
| 635 A.D | Hazrat Sa'ad bin Abi Waqqas (RA) defeated the Irani army in the battle of Qadisiya. Islamic army defeated the Irani army to complete the conquest of Iraq. Hazrat Khalid bin Walid conquered Damascus |
| 635 A.D | Muslim army defeated the Roman army at Yurmuk |
| 637 A.D | Muslims captured Jerusalem |
| 644 A.D | The Irani sultanate crushed Karman, Seestan, Makran, Kharasan and Egypt Conquered |

### → Hazrat Usman (R.A) (644 A.D. TO 656 A.D.)

| | |
|---|---|
| 644 A.D | Hazrat Usman (RA) elected as the Caliph of the Muslims |
| 649 A.D | The Muslims advanced against the Romans and conquered the Island of Cyprus |
| 649-51 A.D | Hazrat Abdullah bin Awam conquered Ghazna and Kabul |
| 651 A.D | Conquest of Balakh, Bukhara and Khwarzam |
| 651 A.D | Conquest of Tripoli (Libya) and Tunis |
| 651 A.D | Unrest in different provinces of the Sultanate |
| 652 A.D | The end of Saasanis |
| 656 A.D | Hazrat Usman martyred |

### → Hazrat Ali (RA) (655 A.D. TO 661 A.D.)

| | |
|---|---|
| 656 A.D | Elected as Caliph of the Muslims Conquered the opponents in the battle of Jamal. |
| 657 A.D | Kufa made the capital of the Islamic Sultanate. |
| 657 A.D | Battle of Suffain |
| 659 A.D | Defeat of Kharjis |
| 661 A.D | Hazrat Ali martyred |

## Ashra Mubashra

1. Hazrat Abu Bakar Siddique (may Allah be pleased with him).
2. Hazrat Usman Ghani (may Allah be pleased with him).
3. Hazrat Umar (may Allah be pleased with him).
4. Hazrat Ali (may Allah be pleased with him).
5. Hazrat Abu Talha (may Allah be pleased with him).
6. Hazrat Zubair bin Awam (may Allah be pleased with him).
7. Hazrat Abu Obaida (may Allah be pleased with him).
8. Hazrat Abdur Rehman bin Auf (may Allah be pleased with him).
9. Hazrat Sa'ad bin Abi Waqas (may Allah be pleased with him).
10. Hazrat Saeed bin Zaid (may Allah be pleased with him).

## The Great Generals in the History of Islam

1. Hazrat Ali (may Allah be pleased with him)
2. Hazrat Amir Hamza (may Allah be pleased with him)
3. Hazrat Sa'ad bin Abi Waqas (may Allah be pleased with him)
4. Hazrat Khalid bin Walid (may Allah be pleased with him)
5. Musa bin Nusair
6. Hazrat Umar bin al-Ass (may Allah be pleased with him).
7. Hazrat Abu Obadia (may Allah be pleased with him)
8. Tariq bin Zayad
9. Muhammad bin Qasim
10. Salah-ud-din Ayubi
11. Mahmood Ghaznavi

## Eminent Muslims and their Fields of Repute

| NAMES | FIELDS |
|---|---|
| Al Bairuni | Historian and geographer |
| Ibrahim bin Sina | Mathematician and physicians |
| Jabar bin Hayan | Physician and druggist |
| Umar bin Hayan | Mathematician and astrologer |
| Yaqub Khayyam | Mathematician and philosopher |
| Muhammad bin Musa | Mathematician |
| Yaqub bin Tariq | Astrologer |
| Al-Masudi | Biographer and geographer |
| Al-Farabi | Philosopher |
| Abu-Kamal | Mathematician |

# Prophets:

## Land of Prophets:

Palestine is the land of prophets. Many prophets were born & died in Palestine, such as Prophet Ibrahim, Yaqub, Yusha, Lut , Dawood , Suleiman Musa A.S.

## Titles of Prophets:

Adam A.S - Safiullah
Ibrahim A.S - Khalilullah
Musa A.S - Kaleemullah
Shoaib A.S - Khateeb ul Anbiaa
Essa A.S - Messih, Roohullah
Younus - Sahibul Hoot, Zul-Noon
Muhammad S.A.W - Khatam al-Nabiyeen

## Relationships of Prophets:

- Hazrat Ismail was the son of Hazrat Ibrahim A .S
- Hazrat Musa and Hazrat Haroon A.S were brothers
- Hazrat Lut was nephew of Hazrat Ibrahim
- Hazrat Shees was son of Hazrat Adam
- Hazrat Yousuf was son of Hazrat Yaqub A.S
- Hazrat Yaqub was son of Hazrat Ishaq A.S
- Hazrat Ishaq was son of Hazrat Ibrahim A.S

## Divine Books:

There are four divine books:

- Torah - given to Hazrat Musa A.S
- Zabur - given to Hazrat Dawood A.S
- Enjeel ( Bible) - given to Hazrat Essa A.S
- Qura'an - revealed to Hazrat Muhammad S.A.W

## Religious sacred texts of major religions:

- Islam
  Quran ( revelation of Allah ) and Hadith ( Teachings of the holy Prophet S.A.W )
- Baha'i
  The Seven Valleys and The Four Valleys by Baha'u'llah
- Buddhism
  The Tipitaka - Teachings of Buddha
- Christianity
  The Bible - considered to be divine book
- Hinduism
  The Vedas and The Upanishads - compiled 4000 to 6000 years ago
- Jainism
  The Agamas
- Judaism
  The Tanakh and The Talmud
- Shintoism
  The Kojiki
- Sikhism
  The Guru Granth Sahib
- Taoism
  The Dao De Jing
- Zoroastrianism
  The Avesta

# Nisab of Zakat for Animals

## Nisab of Zakat for Camel

| | |
|---|---|
| 5 to 9 grazing camels for one year | 1 sheep |
| 10 to 14 grazing camels for one year | 2 sheep |
| 15 to 19 grazing camels for one year | 3 sheep |
| 20 to 24 grazing camels for one year | 4 sheep |
| 25 to 35 grazing camels for one year | 2-year-old she-camel |
| 61 to 75 grazing camels for one year | 5-year-old she-camel |

## Nisab of Zakat for Cattle

| | |
|---|---|
| 30 to 40 heads of cattle | 2.5-year-old male or female weaned calf |
| 40 to 60 heads of cattle | 3-year-old weaned calf |
| 60 heads of cattle | 2 1-year-old calves |
| more than 60 heads of cattle | 1 calf for each 30 heads and 1 weaned calf for each 40 heads. |

### Nisab of Zakat for Sheep or Goats

| | |
|---|---|
| 40 to 120 sheep or goats | 1 sheep or goat<br>For 40 to 120 it is the same |
| 121 to 200 sheep or goats | 2 sheep |
| 201 to 300 sheep or goats | 3 sheep |
| 301 to 400 sheep or goats | 4 sheep |
| For every additional sheep or goat, an extra sheep is added | |

## Zakat on Gold and Silver

Nisab on Gold and Silver is 2.5% after certain conditions are met. Two important conditions are: Compete ownership of Gold and Silver and lapse of a year on it. In light of Sahih Hadith, the value of Nisab is 52 ½ tolas of silver or 7 ½ tolas of gold.

## Usher on crops

If the agricultural land is irrigated naturally by rain or by natural water bodies such as rivers, streams etc then the usher payable is 10% of the total agricultural output whereas if the agricultural land is artificially irrigated then the amount of usher to be paid on the total agricultural output is 5% of the total agricultural output value.

## Difference between Usher and Zakat.

Zakat is the voluntary alms tax levied on rich muslims, it is aimed to help the poor.

Usher is a tax levied on agricultural produce.

## Recipients of Zakat

1. Fukra- Includes poor people who are devoid of wealth equal for Nisab.
2. Masakeen- Extremely poor people who can't even finance their basic necessities.
3. Al-Alemeen- A person or a body appointed by the Islamic State for the purpose of collection of Zakat. It is not a compulsion that they need to be a needy person.
4. Recent converts to Islam deprived of basic necessities.
5. Al Raqib- Slaves who have agreement with their master for freedom upon payment of a certain amount.
6. Poor people trapped in debt given that the debt is not used for un-islamic purposes.
7. To those who have to fulfill certain obligations but are unable to do so due to lack of wealth.
8. Ibn e Sabeel- Travelers who might be well to do at home but are devoid of basic necessities during their journey.

## Important Islamic Terminologies

- **Daa'i:** A missionary in Islam.
- **Dar-al-harb:** A term used for the non-Muslim world and means "House of War."
- **Dar-al-Islam:** A term that refers to the Islamic world and means "House of Islam."
- **Da'wah:** Its literal meaning is to invite others to Islam.
- **Dhimmis:** These are conquered people living under Muslim rule.
- **Fatwa:** This is an Islamic legal ruling or edict.
- **Batil:** void
- **Diyya:** Financial compensation paid to the family of the victim incase of murder of the victim or it is the financial obligation paid to the victim incase of bodily harm or property damage.
- **Qisas:** is retributive punishment for the offender.
- **Gunnah e Kabira:** refers to greater sins in Islam.
- **Kiswah** – the cover of Kaaba – is laid on the Kaaba on the 9th of Dul Hijjah – the day when pilgrims go to the mountain of Arafat
- **"Namaz"** is an Urdu word hence, it is not mentioned in the Qur'an; instead, the word "Salah" is mentioned. However, the word "Salah" is mentioned only 67 times but the commandments to offer Salah/Namaz occurs 700 times in the Qur'an. Likewise, Salah and Zakat together are mentioned 32 times.

## Names of Islamic Months

| No. | Name | Meaning |
|---|---|---|
| 1 | Muharram | Forbidden |
| 2 | Ṣafar | Void |
| 3 | Rabi-al-Awwal | The first spring |
| 4 | Rabi-al-Thani | The second spring |
| 5 | Jumada-al-Awwal | The first of parched land |
| 6 | Jumada-al-Thani | The second of parched land |
| 7 | Rajab | Respect & Honour |
| 8 | Shaban | Scattered |
| 9 | Ramaḍan | Burning heat |
| 10 | Shawwal | Raised |
| 11 | Dhū al-Qa'dah | The one of truce |
| 12 | Dhū al-Hijjah | The one of pilgrimage |

### Sacred Months:

In Islam, four months are sacred. Fighting is forbidden during these months except the self defence.

- Zul-Qa'dah
- Zul-Hijjah
- Muharram
- Rajab

### Islamic Occasions:

In Islam, there are two celebrations.

- Eid al-Fitr ( Festival of breaking the Fast ) - it is celebrated on the 1st of Shawwal
- Eid al-Adh'ha ( Festival of Sacrifice ) - it is celebrated on the 10th - 12 of Zul-Hijjah

### Ramazan:

This month is considered as the month of Fasting, in Islam. This is a holy month in islamic culture, as the revelation of the Quran began this month. Moreover, "Laylatul Qadr" (a sacred night) is also in Ramazan.

## Islamic Law of Heritage:

### Share of Wife:

If they have children then the wife's share will be ⅛ of the inheritance, otherwise her share will be ¼.

### Share of Husband:

If they have children then the husband's share will be ¼ of the inheritance, otherwise his share will be ½.

### Share of son:

Twice of daughter's share

### Share of daughter:

Half of son's share

## Hajj:

**Hajj is of three types:**

**Hajj al-Ifrad** – This refers to performing the Hajj alone without Umrah.

**Hajj al-Qiran** – This refers to the one who performs both Hajj and Umrah together while being in the state of Ihram.

**Hajj al-Tamatt'u** – The most common type of Hajj pilgrimage and the one Prophet S.A.W encouraged his companions to perform. It refers to performing Umrah during the Hajj season and then to complete the Hajj between the 8th and 13th day of Dhu al-Hijjah.

## Manasik e Hajj (Hajj Rituals):

**Day 1:**
Pilgrims will walk around the Kaaba seven times. This is called Tawaf e Qudoom (Welcoming Tawaf ). Then pilgrims head towards Safa and Marwah hills. They will run seven times between the hills. This is called "Sa'ai'i ( The effort )

**Day 2:**
After the Morning Prayer "Fajr", pilgrims will go to Mina. They spend the whole day in Mina praying.

**Day 3:**
This is the day Hajj. Pilgrims move to Arafat where they stay the whole day praying and listening to the sermon of Hajj.
After the sunset pilgrims will leave for the Muzdalifah. They offer Maghrib and Eshaa prayer combined, in Muzdalifa. They will spend the night in Muzdalifah.

**Day 4:**
Pilgrims will return to Mina to stone the devil symbolically by throwing seven pebbles at the largest of the three pillars.
After the stoning of the devil, sheep or goat would be slaughtered.
Male pilgrims shave their heads completely and females will clip pieces of the hair.
Pilgrims will do another round of stoning the devil.
Then they can head to the Makkah to do the Tawaaf.

**Day 5:**
If pilgrim was not able to return to Makkah, he would do the stoning on the day 5 and 6 also as he had done on the 4th day.

Before leaving Makkah for their home, pilgrim will do another Tawaaf, which is called "Tawaaf e Wada'a" ( Farewell Tawaaf )

## Sacred Places:

**First Mosque on Earth:**
First mosque ever on the earth is al-Masjid al-Haraam, built by Hazrat Ibrahim A.S and his son Hazrat Islamil A.S

**Offering Prayers in Makkah:**
Muslims used to pray secretly before Hazrat Hamza embraced Islam. Once he embraced Islam, he announced that Muslims can offer the prayers without fear of disbelievers and I would protect Muslims.

**Masjid Quba:**
Masjid Quba is the first mosque in Muslim history. It is the first place where the holy prophet S.A.W rested after migration from Makkah to Madinah.
When Holy Prophet arrived village of Quba, he stayed at the house of Hazrat Kulthum bin Hadam. After several days, he laid the foundation of Masjid Quba on the land which was owned by Hazrat Kulthum R.A.

**Masjid Qiblatain:**
This mosque is located in Madina, and was built by Sawad bin Ghanam al-Ansari in 2 A.H.

**Change of Qibla:**
After migration to Madina, Muslims offered their prayers facing al-Aqsa Mosque. The jews of Madina started claiming that the prophet had to take their sacred city 'Jerusalem' as the Qibla. This arose doubts about validity of Islam.
Meanwhile, the Prophet was irritated to hear such rumors, and used to look up to the sky waiting for common from Allah to face the Kaba'ah as Qibla.
After 16 months approximately, Allah commanded Muslims to face Kaba'ah as their Qibla.
The mosque where the Prophet received the command to change the Qibla, was Masjid Qiblatayn.

**Masha'ar-e-Haraam:**
Masha'ar-e-Haraam is the title of the valley of Muzdalifa. It means literally "The sacred sign". As the Muzdalifa is the place where the pilgrimage is performed, so it is named "Masha'ar-e-Haraam".

**Cave Hira:**
Revelation of Qura'an started in the cave hira, which is located at the Jabal al-Nour ( Mountain of Light), near Makkah.
First revelation was اِقْرَاْ بِاسْمِ رَبِّكَ الَّذِىْ خَلَقَ
, and the last revelation was وَاتَّقُوْا يَوْمًا تُرْجَعُوْنَ فِيْهِ اِلَى اللّٰهِ

**OTHER INFORMATION:**
Before Makkah was conquered by the Holy Prophet (SAWW), Uthman ibn Talha was the custodian of the key to Kaaba and the Prophet (SAWW) gave it back to him. The Prophet (SAWW) said, "Take it, O Children of Talha, eternally up to the Day of Resurrection, and it will not be taken from you unless by an unjust, oppressive tyrant." Uthman ibn Talha is known as "Sadin of Mecca."

## Mujtahid and Mujaddid:

**Imam Abu Hanifa:**
His full name was Numan ibn Sabit. He was born in the city of Kufa, Iraq during the reign of Abd al-Malik ibn Marwan, in 80 AH.
He was the founder of Hanafi School of Jurisprudence.
His books are "al-Fiqh al-Akbar", "Kitab al-Aasaar".
His famous students are "Abu Yousuf al-Qazi", "Muhammad ibn al-Hassan", and "Zufar ibn Huzyl".
He passed away in Baghdad in 150 AH.

**Imam Malik ibn Anas:**
He was born in the city of Madina in 93 AH and died in 179 AH in Madina.
He was titled as "Imam of the Abode of Emigration".
His famous book is "al-Muwatta".

**Imam al-Shafi'i:**
He was born in 150 AH, in Gaza and died in 204 AH, in Fustat, Egypt.
He was student of Imam Malik bin Anas and Imam Muhammad bin al-Hasan.
He wrote several books including "Kitab al-Risala", "Kitab al-Umm", "Musnad al-Shafi'i".

**Imam Ahmad ibn Hanbal:**
He was born in Baghdad in 164 AH and died in 241 AH in Madina.
He was student of Imam Abu Yousuf al-Qazi and Imam al-Shafi'i.
His famous book is "Musnad".

**Umar bin Abdel Aziz:**
He was born in 61 AH and died in 101 AH.
he has been called "the most pious and devout" of the Umayyad caliphs and was described as the first Mujaddid and fifth righteous caliph of Islam. He was also a great-grandson of the second caliph, Umar ibn Al-Khattab.

**Books of four Imams:**
Imam Abu Hanifa : "Kitab-ul-Aasaar", "al-Fiqh ul Akbar"
Imam Malik bin Anas: "al-Muattaa"
Imam Shafi'i: "Kitab al-Risala", "Kitab al-Umm", "Musnad al-Shafi'i"
Imam Ahmad bin Hambal: "Musnad Ahmad", "al-Elal", Usool al-Sunnah", "Kitab al-Zuhd"

**Mujaddid Alf Thani:**
Imam Ahmad Sirhindi is called "Mujaddid Alf Thani". He was born on June 26, 1564 in Sirhind and died on December 10, 1624.
He stood against the Mughul heresy introduced by Jalaud Din Akbar. He is called the Mujaddid because he started the movement of purifying Islam and restored its traditional orthodoxy.

**Shah Waliullah:**
Shah Waliyullah was born on 21 February 1703 to Shah Abdur Rahim Dehlavi, a prominent Islamic scholar of Delhi. His actual name was "Ahmad", but he was known as Shah Walliullah because of his piety.
He had completed the memorization of the Qur'an by the age of seven. By sixteen he had completed the standard curriculum of Hanafi law, theology, geometry, arithmetic and logic.
He travelled to Hijaz for the advance education of Hadith.
His father, Shah Abdur Rahim was the founder of the Madrasah-i Rahimiyah. He was on the committee appointed by Aurangzeb for compilation of the code of law, Fatawa-e-Alamgiri.
Shah Waliullah had four sons, "Shah Abdul Aziz", "Shah Rafiuddin", "Shah Abdul Qadir" and "Shah Abdul Ghani".
Shah waliullah wrote a lot of books on several topics of islamic theology. Some of them are "al-Fawz al-Kabir", "Hujjatullah al-Baaligha", "izaalatul Khifa'a".
One of the prominent work he had done was the "Persian Translation of Qura'an".
He passed away on 10 August 1762 in Dehli.

## Historical Facts:

**Bayt al-Hikmah:**
Bayt al-Hikmah ( House of Wisdom ) is also known as the Grand Library of Baghdad. It refers to a major Abbasid public academy and intellectual center in Baghdad. It was founded by the Abbasid Caliph Haroon al-Rashid. The famous translation movement was started in that house of wisdom. A large number of books from the Greec, India, and Persia were translated into Arabic. Yaqub ibn Ishaq al-Kindi, and al-Khwarizmi had also worked in the House of Wisdom.

## Translations of Quran in different languages

| | |
|---|---|
| Latin | Robertus Ketenensis |
| Spanish | Julio Cortes, Ahmed Abboud and Rafael Castellanos, Kamel Mustafa Hallak, Abdel Ghani Melara Navio |
| French | Andre du Ryer |
| English | Alexander Ross, George Sale, Mirza Abul Fazl |
| Urdu | Shah Abdul Qadir, Ahmed Raza Khan Barelvi (Kanzul Iman), Molana Ashiq Elahi Merathu |
| Chinese | Yusuf Ma Dexin, Wang Jingzhai |

## Types of sentences in Arabic

i. Khabaria/Mufeeda – which is subdivided into two kinds:
   a. Ismia – a sentence in which the first word is a noun
   b. Failla – a sentence in which the first word is a verb
ii. Shibh Joomla – Prepositional Phrase

How many days did Prophet Younus stay in the belly of the whale?
There are differing views on how long he was inside the belly of the whale – some say 3 days, some say 40 days, while some still say he was swallowed in the morning and thrown out in the evening.

## Hazrat Khalid bin Waleed's acceptance of Islam

Khalid Bin Waleed accepted Islam in 627-629 AD i.e. between 6th to 8th Hijri. However, it is believed that he accepted Islam in 627 AD and joined the Prophet (SAWW) during the conquest of Makkah in 629 AD i.e. 8th Hijri.

## Shortest Surah of the Qur'an Surah Kausar

It is the 108th Surah, has only 3 verses and it was revealed for honoring the daughter of the Prophet (SAWW) – Hazrat Fatima (RA). The Surah talks about abundance. It tells the Prophet (SAWW) to not be upset that he has no sons to continue his lineage because Allah has given him Fatima (RA) to continue his lineage for him so he should pray to Allah and thank him and sacrifice a camel in celebration.

## Prophet Shu'ayb (AS)

The Prophet Shu'ayb (AS) was appointed by Allah to guide the people of Midian in Arabia. These people were robbers and cheaters who were blessed by Allah but they still stole from others and cheated excessively. This is mentioned in Surah Al A'raf, the 7th Surah of the Qur'an.

# EVERYDAY SCIENCE

## List of Phobias

- **Ablutophobia** – Fear of bathing
- **Achluophobia** - Fear of darkness
- **Acrophobia** - Fear of heights
- **Aerophobia** - Fear of flying
- **Algophobia** - Fear of pain
- **Amaxophobia** - Fear of driving
- **Androphobia** - Fear of men
- **Anthropophobia** - Fear of flowers
- **Anthropophobia** - Fear of people
- **Arachnophobia** - Fear of spiders
- **Astraphobia** - Fear of thunder and lightning
- **Atelophobia** - Fear of imperfection
- **Atychiphobia** - Fear of failure
- **Autophobia** - Fear of being alone
- **Barophobia** - Fear of gravity
- **Bathmophobia** - Fear of stairs or steep slopes
- **Batrachophobia** - Fear of amphibians
- **Belonephobia** - Fear of pins and needles
- **Bibliophobia** - Fear of books
- **Cacophobia** - Fear of ugliness
- **Catagelophobia** - Fear of being ridiculed
- **Catoptrophobia** - Fear of mirrors
- **Chionophobia** - Fear of snow
- **Chromophobia** - Fear of colors
- **Chronophobia** - Fear of Time
- **Claustrophobia** – Fear of confined spaces
- **Coulrophobia** - Fear of clowns
- **Cynophobia** - Fear of dogs
- **Dendrophobia** - Fear of trees
- **Domatophobia** - Fear of houses
- **Dystychiphobia** - Fear of accidents
- **Ecophobia** - Fear of the home
- **Elurophobia** - Fear of cats
- **Entomophobia** - Fear of insects
- **Ephebiphobia** - Fear of youth
- **Equinophobia** - Fear of horses
- **Gamophobia** - Fear of marriage
- **Genuphobia** - Fear of knees
- **Glossophobia** - Fear of speaking in public
- **Gynophobia** - Fear of women
- **Heliophobia** - Fear of the sun
- **Hemophobia** - Fear of blood
- **Herpetophobia** - Fear of reptiles
- **Hydrophobia** - Fear of water
- **Hypochondria** - Fear of illness
- **Iatrophobia** - Fear of doctors
- **Koinoniphobia** - Fear of rooms full of people
- **Leukophobia** - Fear of the color white
- **Lilapsophobia** - Fear of tornadoes and hurricanes
- **Lockiophobia** - Fear of childbirth
- **Mageirocophobia** - Fear of cooking
- **Megalophobia** - Fear of large things
- **Melanophobia** - Fear of the color black
- **Microphobia** - Fear of small things
- **Mysophobia** - Fear of dirt and germs
- **Necrophobia** - Fear of death or dead things
- **Noctiphobia** - Fear of the night
- **Nosocomephobia** - Fear of hospitals
- **Nyctophobia** - Fear of the dark
- **Obesophobia** - Fear of gaining weight
- **Octophobia** - Fear of figure 8
- **Ombrophobia** - Fear of rain
- **Ophidiophobia** - Fear of snakes
- **Ornithophobia** - Fear of birds
- **Pathophobia** - Fear of disease
- **Pedophobia** - Fear of children
- **Philophobia** - Fear of love
- **Phobophobia** - Fear of phobias
- **Pedophobia** - Fear of feet
- **Porphyrophobia** - Fear of the color purple
- **Pteridophobia** - Fear of ferns
- **Pteromerhanophobia** - Fear of flying
- **Pyrophobia** - Fear of fire
- **Samhainophobia** - Fear of Halloween
- **Scolionophobia** - Fear of school
- **Selenophobia** - Fear of the moon
- **Somniphobia** - Fear of sleep
- **Tachophobia** - Fear of speed
- **Tonitrophobia** - Fear of thunder
- **Trypanophobia** - Fear of needles/injections
- **Venustraphobia** - Fear of beautiful women
- **Verminophobia** - Fear of worms
- **Wiccaphobia** - Fear of witches and witchcraft
- **Xenophobia** - Fear of strangers or foreigners
- **Zoophobia** - Fear of animals

## Diseases

**Infectious diseases** are caused by the introduction of organisms including bacteria, viruses, fungi, and parasites. They may transmit through:

(a) the air as in tuberculosis, smallpox, and influenza;
(b) objects such as clothes, furniture as in smallpox, scarlet fever;
(c) water and food as in cholera, dysentery, etc.
(d) skin wounds as in tetanus

(e) flies, insects, etc., as in cholera, malaria
(f) direct contact as in venereal diseases.

## Types of diseases:

- **Endemic diseases** - These are confined to an area for example malaria in marshy places.
- **Epidemic diseases** - These spread from place to place and affect a huge population.
- **Sporadic diseases** - These occur here and there, with no connection to its origin.
- **Deficiency diseases** - These are caused by the deficiency of some essential ingredients.
- **Contagious diseases** - These are caused by actual contact with the patient. For example AIDS.

## Dictionary of Diseases

★ AIDS is an autoimmune disorder. AIDS is the abbreviation of Acquired Immunodeficiency Syndrome. It spreads through sexual contact and blood transfusion.
★ **Alzheimer:** shows symptoms of dementia and is progressive. It is disorder of brain and is associated with loss of memory.
★ **Amnesia:** loss of memory as a result of damage of the brain. People with amnesia forget facts and memories and may have trouble forming new ones.
★ **Anemia:** caused by the deficiency of healthy red blood cells, oxygen carrying capacity of blood is decreased. Also caused by the deficiency of iron.
★ **Arthritis** - causes inflammation of one or more joints; caused by rheumatic fever.
★ **Asthma** - a chest disease causing difficulty in breathing.
★ **Blood pressure** - causes are high chronic anxiety, kidney disease, etc. Sometimes treated by cutting the nerve of the sympathetic nervous system.
★ **Cancer** - abnormal growth of body cells; symptoms include wounds that do not heal, unusual bleeding, change in bowel or bladder habits. Treatment is surgery in the early stages.
★ **Cataract** - clouding of the lens of the eye, must be operated.
★ **Chicken Pox** - Caused by the Varicella Virus: transmitted by direct contact and infected objects, symptoms fever, cold skin eruption with red spots.
★ **Cholera** - Caused by the bacterium *Vibrio cholerae*; transmitted by contaminated food and water, Symptoms - vomiting, diarrhea, muscular cramps.
★ Colitis is inflammation of inner lining of colon or large intestine.
★ **Coma** - complete loss of consciousness.
★ **Common Cold** - Caused by Rhinovirus, symptoms are headache, cough, nasal discharge, fever.
★ **Dengue Fever** - caused by the Dengue virus, transmitted by mosquito bite, symptoms are fever, muscular pains. Backache, headache, skin rash.
★ **Diabetes** - a disease of the pancreas. The sugar in food does not metabolize and accumulates in the blood and is excreted through urine. Hunger, loss of weight; weakness appears.
★ **Diarrhea** - Loose bowels, due to over-eating or food poisoning.
★ **Diphtheria** - caused by *Corynebacterium diphtheriae*, symptoms are sore throat, fever, vomiting, and formation of patches in throat.
★ **Emphysema** is degenerative disorder in which air sacs in lungs are affected causing shortness of breath. It caused by long term exposure to irritants like cigarette smoke.
★ **Epilepsy:** central nervous system disorder, includes seizures and abnormal behavior
★ **Gastritis** is the inflammation of stomach lining.
★ **Gonorrhea** is caused by sexually transmitted bacterium. It affects urethra, rectum, or throat.
★ **Hemophilia:** a hereditary disease in which blood does not clot normally due to the absence of blood clotting proteins.
★ **Hemorrhage** is an escape of blood from ruptured blood vessel. This can occur in any part of the body.
★ **Hepatitis** is an inflammation of the liver. It is usually caused by viral infection, toxic agents or drugs. It is characterized by jaundice, abdominal pain, liver enlargement, fatigue, and sometimes fever. It may be mild or can be acute and can lead to hepatic cancer. The different types of hepatitis are:
★ **Hepatitis A:** Formally called infectious hepatitis is transmitted by contact with feces from infected individuals.
★ **Hepatitis B:** Serum hepatitis.
★ **Hepatitis C:** Formerly called non-A, non-B hepatitis, passes through blood, from mother to child during pregnancy and afterward and by sexual contact.
★ **Hepatitis D:** Delta hepatitis.
★ **Hepatitis E:** A virus transmitted through the feces of an infected person.
★ **Hepatitis F, G:** Caused by virus yet unidentified.
★ **Insomnia** - the inability to sleep.
★ **Leprosy** - caused by *Mycobacterium leprae*, symptoms are skin lesions, ulcers, nodules, deformity of fingers and toes and wasting of body parts.
★ **Leukemia** - increase in white blood corpuscles in the blood. The red blood cells break down and cause hemorrhage in various parts of the body.
★ **Malaria** - caused by a mosquito bite. The parasite enters the blood and attacks the blood cells. Malaria affects different organs of the body including kidney, liver, or spleen. Production of red blood cells is affected which can cause anemia
★ **Measles** - caused by Paramyxovirus, transmitted by direct contact with infected persons and air, symptoms are loss of appetite, vomiting, rash, sensitivity to light.
★ **Meningitis** is the inflammation of the layers covering brain and spinal cord. Its symptoms are fever, siff neck, and headache. It is a bacterial infection.
★ **Microcephaly** is the condition in which baby's head is much smaller than expected according to the size of rest of the body.
★ **Mumps** - Paramyxovirus transmitted by direct contact, symptoms include fever or swelling of glands, such as salivary glands, headache, backache.
★ **Parkinson:** brain disorder, difficulty balancing body and coordination
★ **Plague** - caused by flies that carry germs from infected rats.

- **Pleurisy** is the inflammation of pleural membrane around lungs. It occurs mostly due to viral infection. It causes sharp chest pain.
- **Pneumonia** - caused by *Diplococcus pneumoniae;* symptoms are chill, pain in chest, Jaundice.
- **Polio** - a disease of the nervous system, results in an inability to move; caused by a virus.
- **Rabies** - caused by Rabies virus; transmitted through the bite of a mad dog. Main symptom is hydrophobia – fear of water. Other symptoms are headache, vomiting, fever, hoarse voice, paralysis.
- **Rheumatoid arthritis** causes pain and destruction in joints of the body. It is an autoimmune disorder.
- **Sleep apnea** – breathing repeatedly stops and starts during sleep.
- **Smallpox** is caused by variola virus; symptoms are high fever, headache, skin rash, bright red spots.
- **Sunstroke** - symptoms include headache, dizziness, high temperature.
- **Syphilis** is caused by *Treponema pallidum*. It spreads through sexual contact and from mother to child through breastfeeding.
- **TB or tuberculosis** is caused by Mycobacterium tuberculosis. It mainly affects lungs but can also affect other organs of the body. It spreads through air when the patient talks, sneezes, or coughs.
- **Tetanus** - caused by *Clostridium tetani,* transmitted by direct or indirect inoculation of wound, symptoms include painful contraction of muscles, lockjaw.
- **Thrombosis** is the formation of blood clot in the blood vessel which results in obstruction of blood flow. This may cause damage to heart tissues and result in heart attack.
- **Tonsillitis** - infection in tonsils caused by streptococci. Symptoms are pain while swallowing.
- **Typhoid** - Caused by the bacterium *Salmonella typhae;* transmitted by contaminated food and water, symptoms include fever, slow pulse, vomiting, chilsl, and diarrhea.
- **Ulcer** is the formation of sores in the lining of the stomach. They form due to acidity. Symptom is stomach pain.
- **Whooping cough** - symptoms are fever, inflammatory respiratory passage, fits of coughing. Prevented by isolation of the patient.
- Zika virus spreads through infected aedes specie mosquito. Symptoms include fever, rashes, muscle and joint pain, red eye.

## Diseases Spread By Insects

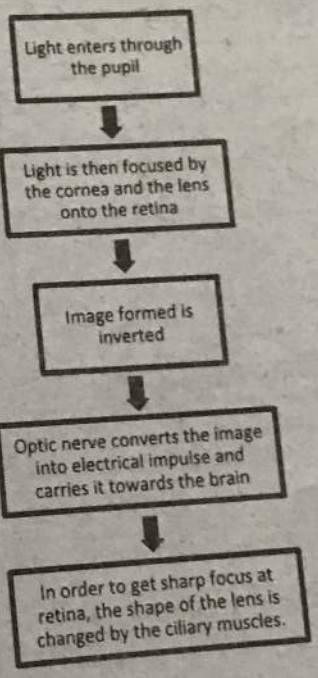
Insects that transmit diseases are called vectors.

| | | |
|---|---|---|
| 1. | Ants | dysentery, cholera, enteric fever. |
| 2. | Bugs | anthrax, leprosy |
| 3. | Mosquito | (Culex) dengue fever, malaria, zika virus |
| 4. | Flies | cholera, tuberculosis, dysentery |
| 5. | Liceleprosy, typhus | |
| 6. | Rat flea | plague |
| 7. | Sand-fly | fever |
| 8. | Tsetse fly | sleeping sickness |

## Human Eye

The human eye is sensitive to a yellowish green color to be specific. So, the eye has photoreceptors named as "cones" which detect red, blue and green colours and these receptors are erdopsin, porpyrosin and cyanopsin. However, the human eye is also sensitive to light of wavelengths above 555 nanometer and this wavelength corresponds to the green light hence, this color produces a lot of brightness in the eye which makes it sensitive to it.

| Part of eye | Description |
|---|---|
| Sclera | White portion of eye, an opaque layer |
| Iris | A colored ring at the front of the eye - it can change the size of the pupil in different light intensities |
| Pupil | A round opening in the middle of the iris |
| Cornea | A transparent, and dome-shaped layer on the front of the eye. It helps to focus the light because of its refractive surface. |
| Conjuctiva | The thin, transparent tissue that covers the inner part of the eye. |
| Lens | Focus light onto the back of the eye, muscles attached to the lens change their thickness to adjust focus |
| Retina | A light sensitive layer of the tissue at the back or inner part of the eye Captures the light that enters eye. Transforms the light signals into electrical signals |




- Human eye has convex lens.
- Cornea is the part of an eye used in eye donation.
- Retina is the sensitive layer of an eye.
- Trachoma is an infectious disease related to the eye. It is caused by **Chlamydia trachomatis**. It causes roughness of the eyelids.
- Conjuctivitis is the infection of white part of eye called conjunctiva. Redness appears in the white portion.
- In long sightedness, person cannot see the near object clearly.
- In short sightedness, person cannot see the distant object properly.

- Convex lens is used to fix long sightedness. Concave lens is used to fix short sightedness.
- Convex lens produces real and inverted images. Concave lens produces virtual and erect images.
- Convex lens is called converging lens. Concave lens is called diverging lens.
- Light passes through the cornea and lens and focuses on retina.
- Glaucoma is caused by increase in pressure within eye ball.

## Units of Measurement

### SI Units

It is the International System of Units that is applied worldwide.

| Quantity | Unit |
|---|---|
| Length | Meter |
| Mass | Kilogram |
| Time | Second |
| Amount of substance | Mole |
| Electric current | Ampere |
| Temperature | Kelvin |
| Luminous intensity | Candela |

### Units with Conversions:

| | | | |
|---|---|---|---|
| **Distance** | | | |
| Inches (in) | 1 in | = | 2.5 cm |
| Feet (ft) | 1 ft | = | 12 in<br>30 cm |
| Yards (yd) | 1 yd | = | 3 ft<br>90 cm |
| Miles (mi) | 1 mi | = | 1760 yd<br>5280 ft<br>1.6 km |
| **Mass** | | | |
| Ounces (oz) | 1 oz | = | 28.34 g |
| Kilograms (kg) | 1 kg | | 2.2 lb |
| Pounds (lb) | 1 lb | = | 16 oz |
| Tons (t) | 1 t | = | 2000 lb |
| Volume | | | |
| Teaspoons (tsp) | 1 tsp | = | 5 mL |
| Tablespoons (tbsp) | 1 tbsp | = | 3 tsp<br>15 mL |
| Fluid ounces (fl oz) | 1 fl oz | = | 29.57 mL |
| Cups (c) | 1 cup<br>2 cups | = | 8 fl oz<br>1 pt |
| Pints (pt) | 2pt | = | 1 qt |
| Quarts (qt) | 1 qt<br>4 qt | = | 2 pt<br>1 gal |
| Gallons (gal) | 2.32 gal | = | 1 peck |
| Pecks | 1 peck<br>4 pecks | = | 2.32 gal<br>1 bushel |
| Bushels | 1 bushel | = | 4 pecks |

| Time | | | |
|---|---|---|---|
| Seconds (sec) | 60 sec | = | 1 min |
| Minutes (min) | 60 min | = | 1 hr |
| Hours (hr) | 24 hr | = | 1 day |
| Days | 7 days | = | 1 wk |
| Weeks (wk) | (about) 4 wk | = | 1 mo |
| Months (mo) | 12 mo | = | 1 yr |
| Years (yr) | 1 yr | = | 365 days |
| Decades | 1 decade | = | 10 yr |
| Centuries | 1 century | = | 100 yr |
| Millennium | 1 millennium | = | 1000 yr |
| Electricity | | | |
| Watt Hour (wH) | | | |
| Kilowatt Hour (kWh) | | | |
| Joule Hour (J) | | | |
| Kilojoule (kJ/h) | | | |

### Metric Prefixes:

| | | | | |
|---|---|---|---|---|
| Nano | n | $10^{-9}$ | 0.000000001 | 1/1000000000 |
| Micro | u | $10^{-6}$ | 0.000001 | 1/1000000 |
| Milli | m | $10^{-3}$ | 0.001 | 1/1000 |
| Centi | c | $10^{-2}$ | 0.01 | 1/100 |
| Deci | d | $10^{-1}$ | 0.1 | 1/10 |
| Deca | da | 10 | 10 | |
| Hecto | h | $10^{2}$ | 100 | |
| Kilo | k | $10^{3}$ | 1000 | |
| Mega | M | $10^{6}$ | 1000000 | |
| Giga | G | $10^{9}$ | 1000000000 | |
| Tera | T | $10^{12}$ | 1000000000000 | |

### Devices for Measurement:

| | |
|---|---|
| Audiometer | Hearing |
| Barkometer | tanning liquors used in tanning leather |
| Barometer | air pressure |
| Altimeter | Altitudes (e.g., height of plane) |
| Ammeter | electric current |
| Anemometer | Wind speed |
| Calorimeter | heat of chemical reactions |
| Evaporimeter | rate of evaporation |
| Fathometer | ocean depth |
| Heliometer | variation of the sun's diameter, angular distance between two stars |
| Hydrometer | specific gravity of liquids (density of liquids) |
| Hygrometer | Humidity |
| Inclinometer | angle of a slope |
| Planimeter or platometer | Area |
| Polarimeter | rotation of polarized light |
| Potentiometer | voltage (the term is also used to refer to a variable resistor) |
| Profilometer | surface roughness |
| Richter Scale | Intensity of Earthquake |
| Galvanometer | Detect and measure a small electric current. |
| Spectrometer | properties of light |
| Spectrophotometer | intensity of light as a function of wavelength |
| Speedometer | speed, velocity of a vehicle |
| Spirometer | the lung capacity |
| Spherometer | radius of a sphere |
| Sphygmomanometer | blood pressure |

## Measuring Units:

| | | |
|---|---|---|
| Pressure | pascal | Pa |
| Energy | joule | J |
| Power | watt | W |
| Length | meter | m |
| Mass | kilogram | kg |
| Time | second | s |
| Electric current | ampere | A |
| Temperature | kelvin | K |
| Quantity of substance | mole | mol |
| Luminosity | candela | cd |
| Resistance | ohm | Ω |
| Conductance | siemens | S |
| Capacitance | farad | F |
| Inductance | henry | H |
| Magnetic flux | weber | Wb |
| Charge | Coulomb | C |

## Miscellaneous Units of Measure

Below is information about units of measure, including acre, bolt, gross, hertz, knot, light-year, parsec, pi, ream, sound, square, stone, and more.

**Acre**
An area of 43,560 square feet. Originally, the area a yoke of oxen could plow in one day.

**Agate**
Originally a measurement of type size (51/2 points). Now equal to 1/14 inch. Used in printing for measuring column length.

**Ampere**
Unit of electric current. A potential difference of one volt across a resistance of one ohm produces a current of one ampere.

**Astronomical unit (A.U.)**
93,000,000 miles, the average distance of the earth from the sun. Used for astronomy.

**Bale**
A large bundle of goods. In the U.S., the approximate weight of a bale of cotton is 500 pounds. The weight varies in other countries.

**Board foot (fbm)**
144 cubic inches (12 in. × 12 in. × 1 in.). Used for lumber.

**Bolt**
40 yards. Used for measuring cloth.

**Btu**
British thermal unit. Amount of heat needed to increase the temperature of one pound of water by one degree Fahrenheit (252 calories).

**Carat (c)**
200 milligrams or 3.086 grains troy.Originally the weight of a seed of the carob tree in the Mediterranean region. Used for weighing precious stones.

**Chain (ch)**
A chain 66 feet or one-tenth of a furlong in length, divided into 100 parts called links. One mile is equal to 80 chains. Used in surveying and sometimes called Gunter's or Surveyor's chain.

**Cubit**
18 inches or 45.72 cm. Derived from distance between elbow and tip of middle finger.

**Decibel**
Unit of relative loudness. One decibel is the smallest amount of change detectable by the human ear.

**Ell, English**
11/4 yards or 1/32 bolt. Used for measuring cloth.

**Freight, ton (measurement ton)**
40 cubic feet of merchandise. Used for cargo freight.

**Great gross**
12 gross or 1728.

**Gross**
12 dozen or 144.

**Hand**
4 inches or 10.16 cm. Derived from the width of the hand. Used for measuring the height of horses at withers.

**Hertz**
Modern unit for measurement of electromagnetic wave frequencies (equivalent to "cycles per second").

**Hogshead (hhd)**
2 liquid barrels or 14,653 cubic inches.

**Horsepower**
The power needed to lift 33,000 pounds a distance of one foot in one minute (about 11/2 times the power an average horse can exert). Used for measuring power of steam engines, etc. Equal to 746 watt.

**Karat (kt)(carat)**
A measure of the purity of gold, indicating how many parts out of 24 is pure. For example: 18-karat gold is 3/4 pure.

**Knot**
Not a distance, but the rate of speed of one nautical mile per hour. Used for measuring speed of ships.

**League**
Rather indefinite and varying measure, but usually estimated at 3 miles in English-speaking countries.

**Light-year**
5,880,000,000,000 miles, the distance light travels in a vacuum in a year at the rate of 186,281.7 miles (299,792 kilometers) per second. (If an astronomical unit were represented by one inch, a light-year would be represented by about one mile.) Used for measurements in interstellar space. It is the unit of distance.

**Magnum**
Two-quart bottle. Used for measuring wine, etc.

**Ohm**
Unit of electrical resistance. A circuit in which a potential difference of one volt produces a current of one ampere has a resistance of one ohm.

**Parsec**
Approximately 3.26 light-years or 3.08 × 1013 km (1.92 × 1013 mi). Term is a combination of first syllables of parallax and second, and distance is that of an imaginary star when lines drawn from it to both Earth and the Sun form a maximum angle or parallax of one second (1/3600 degree). Used for measuring interstellar distances.

**Pi (π)**
3.14159265+.The ratio of the circumference of a circle to its diameter. For practical purposes, the value is used in four decimal places: 3.1416.

**Pica**
1/6 inch or 12 points. Used in printing for measuring column

width, etc.

**Pipe**
2 hogsheads. Used for measuring wine and other liquids.

**Point**
.013837 (approximately 1/72) inch or 1/12 pica.Used in printing for measuring type size.

**Quintal**
100,000 grams or 220.46 pounds avoirdupois.

**Quire**
Used for measuring paper. Sometimes 24 sheets but more often 25. There are 20 quires to a dream.

**Ream**
Used for measuring paper. Sometimes 480 sheets, but more often 500 sheets.

**Roentgen**
International Unit of radiation exposure produced by X-rays.

**Score**
20 units.

**Sound, speed of**
Usually placed at 1,088 ft. per second at 32°F at sea level. It varies at other temperatures and in different media.

**Span**
9 inches or 22.86 cm. Derived from the distance between the end of the thumb and the end of the little finger when both are outstretched.

**Square**
100 square feet used in building.

**Stone**
Legally 14 pounds avoirdupois in the U.K.

**Therm**
100,000 Btus.

**Township**
U.S. land measurement of almost 36 square miles. The south border is 6 miles long. The east and west borders, also 6 miles long, follow the meridians, making the north border slightly less than 6 miles long. Used in surveying.

**Tun**
252 gallons, but often larger. Used for measuring wine and other liquids.

**Watt**
Unit of power. The power used by a current of one ampere across a potential difference of one volt equals one watt.

**Metric Conversions**
Below are the rules for converting metric and English systems of measurement.

**Cropping Seasons**
Kharif – The Kharif crop is the autumn harvest (also known as the summer or monsoon crop) in India and Pakistan. Kharif crops are usually sown with the beginning of the first rains in July, during the south-west monsoon season. The term Kharif means "autumn" in Arabic. It is harvested in autumn.

**Major Kharif crops**
Millets (Bajra and Jowar)--Paddy (Rice)—Maize--Moong (Pulses)—Groundnut--Red Chillies—Cotton—Soybean—Sugarcane--Turmeric

Rabi – The Rabi crop is the spring harvest (also known as the "winter crop") in India and Pakistan. The term Rabi means "spring" in Arabic, when the crop is harvested.

**Major Rabi crops**
Wheat—Barley—Mustard—Peas—Oats—Bajra—Kadli

## Famous Personalities in the Field of Science

### Theories and Laws by Famous Scientists:

| Theories and Laws | Scientist(s) |
|---|---|
| Heliocentrism | Copernicus |
| Evolution by natural selection | Charles Darwin |
| Quantum theory | Major work of Max Planck, It also includes Einstein, Niels Bohr, Werner Heisenberg, Erwin Schrödinger |
| Theory of relativity | Albert Einstein |
| Cell Theory | Matthias Schleiden and Theodor Schwann |
| Coulomb's law | Charles Augustin de Coulomb |
| Doppler effect | Christian Doppler |
| Faraday's law of induction | Michael Faraday |
| Gauss's law | Carl Friedrich Gauss |
| Pascal's law | Blaise Pascal |
| Dalton's Law | John Dalton |
| Boyle's Law | Robert Boyle |
| Charles' Law | Joseph Louis Gay-Lussac in 1802, it was unpublished work of Jacques Charles in 1780s. |
| Law of Gravitation | Isaac Newton |
| Laws of Motion<br>Law of Inertia | Issac Newton |

### Inventions and inventors:

| Invention | Inventor |
|---|---|
| Printing Press | Johannes Gutenberg |
| Lightning rod | Benjamin Franklin |
| Light bulb | Thomas Edison |
| Telephone | Graham Bell |
| Radio guidance system | Hedy Lamarr |
| World Wide Web | Tim Berner-Lee |
| Cotton gin | Elin Whitney |
| Television | Philo Farnsworth |
| Microscope | Zacharias Janssen |
| Telescope | Hens Lippershey |
| Mobile phone | Martin Cooper |
| Radio | Guglielmo Marconi |
| Paper | Cai Lun |
| Internet | Robert Kahn |
| Airplane | Wright Brothers |
| Steam Engine | Thomas Savery |
| 3D printing | Chuck Hull |
| Pesticide DDT | Paul Muller |
| Vaccine for Malaria | Manuel Elkin Patarroyo |
| Vaccine for Polio | Jonas Salk |
| Vaccine for smallpox | Edward Jenner |
| Vaccine for Rabies | Louis Pasteur, Emile Roux |
| Vaccine for Plague | Alexandre Yersin |
| Vaccine for Measles | Maurice Hileman |
| Vaccine for Cholera | Waldemar Mordecai Haffkine |
| Vaccine for Tuberculosis | Albert Calmette |
| Vaccine for Leprosy | Jacinto Convit Garcia |
| Dynamite | Alfred Nobel |

## List of fathers/founders of various academic fields:

| Who is known as the father of: | Name |
|---|---|
| Psychoanalysis | Sigmund Freud |
| Psychology | Wilhelm Wundt |
| Early Chemistry | Jabir bin Hayan |
| Modern Chemistry | Antoine Lavoisier |
| Microbiology | Leeuwenhoek |
| Computer | Charles Babbage |
| Economics | Adam Smith |
| Ecology | Alexander von Humboldt |
| English Literature | Geoffrey Chaucer |
| History | Herodotus |
| Genetics | Gregor Mendel |
| Quantum Physics | Max Planck |
| Philosophy | Socrates |
| Bacteriology | Louis Pasteur |
| Sociology | Auguste Comte |
| Journalism | Joseph Pulitzer |
| DNA | James Watson |
| Nuclear Physics | Ernest Rutherford |
| Meteorology | Aristotle |

## Muslim Scientists

- Muhammad ibn Mūsā al-Khwārizmī - Father of Algebra
- Abu Mūsā Jābir ibn - Father of Chemistry
- Al-Jazari - Achievements in the Field of Mechanical Science
- Ibn al-Haytham - Father of Modern Optics
- Al Kindi - Contributed immensely in the introduction of Indian numerals to the Islamic and Christian world.

## Facts:

**Photons:**
Particles which contain electromagnetic energy, but they do not have any charge or mass and travel at the speed of light. These particles on a light spectrum increase in energy moving leftwards and are most energetic at the gamma ray end of the light spectrum.

**Hardness of water** means when water contains a lot of minerals – especially calcium sulphate – which cannot be removed through only boiling. Zeolites are made of aluminum, oxygen, and silicon. These crystalline structures are used to remove hardness of water.
Sometimes hardness of water is caused by magnesium and calcium ions which are dissolved in it. In this case, hardness is permanently removed by adding sodium carbonate or if water is passed through a column for ion exchange.

# FOOD AND NUTRITION

## Essential Nutrients

While the animal body can synthesize many of the molecules required for function from the organic precursors, there are some nutrients that need to be consumed from food. These nutrients are termed **essential nutrients**, meaning they must be eaten, and the body cannot produce them.
The omega-3 alpha-linolenic acid and the omega-6 linoleic acid are essential fatty acids needed to make some membrane phospholipids. **Vitamins** are another class of essential organic molecules that are required in small quantities for many enzymes to function and, for this reason, are considered to be coenzymes. Absence or low levels of vitamins can have a dramatic effect on health. Both fat-soluble and water-soluble vitamins must be obtained from food. **Minerals** are inorganic essential nutrients that must be obtained from food. Among their many functions, minerals help in structure and regulation and are considered cofactors. Certain amino acids also must be procured from food and cannot be synthesized by the body. These amino acids are the "essential" amino acids. The human body can synthesize only 11 of the 20 required amino acids; the rest must be obtained from food.

### Water-Soluble Essential Vitamins

| Vitamin | Function | Deficiencies Can Lead To | Sources |
|---|---|---|---|
| Vitamin $B_1$ (Thiamine) | Needed by the body to process lipids, proteins, and carbohydrates; coenzyme removes $CO_2$ from organic compounds | Muscle weakness, Beriberi: reduced heart function, CNS problems | Milk, meat, dried beans, whole grains |
| Vitamin $B_2$ (Riboflavin) | Takes an active role in metabolism, aiding in the conversion of food to energy (FAD and FMN) | Cracks or sores on the outer surface of the lips (cheliosis); inflammation and redness of the tongue; moist, scaly skin inflammation (seborrheic dermatitis) | Meat, eggs, enriched grains, vegetables |
| Vitamin $B_3$ (Niacin) | Used by the body to release energy from carbohydrates and to process alcohol; required for the synthesis of sex hormones; component of coenzyme $NAD^+$ and $NADP^+$ | Pellagra, which can result in dermatitis, diarrhea, dementia, and death | Meat, eggs, grains, nuts, potatoes |
| Vitamin $B_5$ (Pantothenic acid) | Assists in producing energy from foods (lipids, in particular); component of coenzyme A | Fatigue, poor coordination, retarded growth, numbness, tingling of hands and feet | Meat, whole grains, milk, fruits, vegetables |
| Vitamin $B_6$ (Pyridoxine) | The principal vitamin for processing amino acids and lipids; also helps convert nutrients into energy | Irritability, depression, confusion, mouth sores or ulcers, anemia, muscular twitching | Meat, dairy products, whole grains, orange juice |
| Vitamin $B_7$ (Biotin) | Used in energy and amino acid metabolism, | Hair loss, dermatitis, depression, | Meat, eggs, |

| | | | |
|---|---|---|---|
| | fat synthesis, and fat breakdown; helps the body use blood sugar | numbness and tingling in the extremities; neuromuscular disorders | legumes and other vegetables |
| Vitamin $B_9$ (Folic acid) | Assists the normal development of cells, especially during fetal development; helps metabolize nucleic and amino acids | Deficiency during pregnancy is associated with birth defects, such as neural tube defects and anemia | Leafy green vegetables, whole wheat, fruits, nuts, legumes |
| Vitamin $B_{12}$ (Cobalamin) | Maintains healthy nervous system and assists with blood cell formation; coenzyme in nucleic acid metabolism | Anemia, neurological disorders, numbness, loss of balance | Meat, eggs, animal products |
| Vitamin C (Ascorbic acid) | Helps maintain connective tissue: bone, cartilage, and dentin; boosts the immune system | Scurvy, which results in bleeding, hair and tooth loss; joint pain and swelling; delayed wound healing | Citrus fruits, broccoli, tomatoes, red sweet bell peppers |

## Fat-Soluble Essential Vitamins

| Vitamin | Function | Deficiencies Can Lead To | Sources |
|---|---|---|---|
| Vitamin A (Retinol) | Critical to the development of bones, teeth, and skin; helps maintain eyesight, enhances the immune system, fetal development, gene expression | Night-blindness, skin disorders, impaired immunity | Dark green leafy vegetables, yellow-orange vegetables, fruits, milk, butter |
| Vitamin D | Critical for calcium absorption for bone development and strength; maintains a stable nervous system; maintains a normal and strong heartbeat; helps in blood clotting | Rickets, osteomalacia, immunity | Cod liver oil, milk, egg yolk<br>Produced by skin when it comes in contact with sunlight. |
| Vitamin E (Tocopherol) | Lessens oxidative damage of cells and prevents lung damage from pollutants; vital to the immune system | Deficiency is rare; anemia, nervous system degeneration | Wheat germ oil, unrefined vegetable oils, nuts, seeds, grains |
| Vitamin K (Phylloquinone) | Essential to blood clotting | Bleeding and easy bruising | Leafy green vegetables, tea |

## Minerals and their Function in the Human Body

| Mineral | Function | Deficiencies Can Lead To | Sources |
|---|---|---|---|
| *Calcium | Needed for muscle and neuron function; heart health; builds bone and supports synthesis and function of blood cells; nerve function | Osteoporosis, rickets, muscle spasms, impaired growth | Milk, yogurt, fish, green leafy vegetables, legumes |
| *Chlorine | Needed for production of hydrochloric acid (HCl) in the stomach and nerve function; osmotic balance | Muscle cramps, mood disturbances, reduced appetite | Table salt |
| Copper (trace amounts) | Required component of many redox enzymes, including cytochrome c oxidase; cofactor for hemoglobin synthesis | Copper deficiency is rare | Liver, oysters, cocoa, chocolate, sesame, nuts |
| Iodine | Required for the synthesis of thyroid hormones | Goiter | Seafood, iodized salt, dairy products |
| Iron | Required for many proteins and enzymes, notably hemoglobin, to prevent anemia | Anemia, which causes poor concentration, fatigue, and poor immune function | Red meat, leafy green vegetables, fish (tuna, salmon), eggs, dried fruits, beans, whole grains |
| *Magnesium | Required cofactor for ATP formation; bone formation; normal membrane functions; muscle function | Mood disturbances, muscle spasms | Whole grains, leafy green vegetables |
| Manganese (trace amounts) | A cofactor in enzyme functions; trace amounts are required | Manganese deficiency is rare | Common in most foods |
| Molybdenum (trace amounts) | Acts as a cofactor for three essential enzymes in humans: sulfite oxidase, xanthine oxidase, and aldehyde oxidase | Molybdenum deficiency is rare | |
| *Phosphorus | A component of bones and teeth; helps regulate acid-base balance; nucleotide synthesis | Weakness, bone abnormalities, calcium loss | Milk, hard cheese, whole grains, meats |
| *Potassium | Vital for muscles, heart, and nerve function | Cardiac rhythm disturbance, muscle weakness | Legumes, potato skin, tomatoes, bananas |

| | | | |
|---|---|---|---|
| Selenium (trace amounts) | A cofactor essential to activity of antioxidant enzymes like glutathione peroxidase; trace amounts are required | Selenium deficiency is rare | Common in most foods |
| *Sodium | Systemic electrolyte required for many functions; acid-base balance; water balance; nerve function | Muscle cramps, fatigue, reduced appetite | Table salt |
| Zinc (trace amounts) | Required for several enzymes such as carboxypeptidase, liver alcohol dehydrogenase, and carbonic anhydrase | Anemia, poor wound healing, can lead to short stature | Common in most foods |

*Greater than 200mg/day required

## FACTS RELATED TO FOOD AND NUTRITION

- Fats are composed of long chain fatty acids and glycerol.
- Carbohydrates are composed of carbon, hydrogen, and oxygen.
- Proteins are composed of amino acids. They contain carbon, hydrogen, oxygen, and nitrogen.
- Proteins build muscles and used by body builders.
- Proteins are present in muscles, bones, and tissues.
- Hormones are made of proteins. Enzymes are made of proteins.
- Enzymes are biological catalysts. They speed up the biochemical reactions in the body.
- Man can survive without food for more than three weeks.
- Man can survive without water for almost three days.
- Preservatives are used to prevent food from decaying. they preserve food and keep it fresh for a time period. Vinegar is one of the preservatives.
- There is zero cholesterol in egg white. But cholesterol level in egg yolk is very high, about 211 mg.
- 57% of proteins in egg are present in egg white and 43% in yolk.
- Milk contain 87% water.
- The number of calories in fats is highest.
- Vegetables have lowest calories.
- The fat content of milk reduces to great extent when it is skimmed
- Protein are present in meats, sea food, beans and legumes, eggs, nuts, and dairy products.
- Carbohydrates are present in bread, wheat, fruits in the form of fructose or sucrose, potatoes in the form of starch, sugary items, starchy vegetables, etc.
- Fats are present in certain foods including eggs, meat, dairy products, nuts, etc
- Whole grain wheat flour has 11% protein.
- Instant energy is given by carbohydrates.
- Fiber is the non digestible part of the food. It helps in preventing constipation.
- Green vegetables are good source of vitamins and minerals.
- Yeast rises bread in the bread production. It converts larger starch molecules into smaller sugar molecules through the process of fermentation. Ethanol and carbon dioxide are produced in this process.
- Calorie is the unit of energy in food items.
- Honey contains fructose and glucose. Fruits contain fructose. Normal sugar has sucrose in it.
- Milk has lactose in it.
- Fat content is highest in ghee.
- Energy value of fats and oils is 2.25 times more than carbohydrates and proteins.
- 1 gram of carbohydrate has 4 calories.
- 1 gram of fat has 9 calories.
- 1 gram of protein has 4 calories.
- Wheat has about 13% protein, 71% carbohydrate and 1.5% fat.
- Bananas, pineapple, grapes, mango, apples have high carbohydrate content.
- There is zero cholesterol in egg white. But cholesterol level in egg yolk is very high.
- Sulphur is present in leafy green vegetables, fish, chicken, eggs, nuts, legumes, chickpeas, etc.

# Sciences and Their Subjects of Study

## A

- Acarology, the study of ticks and mites
- Actinobiology, the study of the effects of radiation on living organisms
- Actinology, the study of the effect of light on chemicals
- Aerobiology, a branch of biology that studies organic particles, such as bacteria, fungal spores, very small insects and pollen, which are passively transported by the air.
- Aerology, the study of the atmosphere
- Aetiology, the medical study of the causation of disease
- Agnoiology, the study of things of which we are by nature ignorant, or of things which cannot be known
- Agrobiology, the study of plant nutrition and growth in relation to soil conditions
- Agrology
- Canada: the art and science of agriculture
- Non-Canada: the study of soils
- Agrostology, the study of grasses
- Algology, the study of algae
- Allergology, the study of the causes and treatment of allergies; a branch of medicine
- Andrology, the study of male health and disease
- Anesthesiology, the study of anesthesia and anesthetics; a branch of medicine
- Angelology, the study of angels
- Angiology, the study of the anatomy of blood and lymph vascular systems
- Anthropology, the study of humans
- Apiology, the study of bees (apiaries)
- Arachnology, the study of spiders and their kind
- Archaeology, the study of past cultures through the analysis of material remains
- Archaeozoology, the study of relationships between humans and animals over time through examination of animal remains at archaeological sites (also see Zooarchaeology)
- Areology, the study of Mars
- Assyriology, the study of the Assyrians
- Astacology, the study of crayfish
- Asteroseismology, the study of the internal structures of stars as revealed by sound waves (see also Helioseismology).
- Astrobiology, the study of origin of life
- Astrogeology, the study of geology of celestial bodies (e.g., planets, asteroids, comets)
- Astrology, the study of the purported influence(s) of celestial bodies on earthly affairs
- Atmology, the study of the laws and phenomena of aqueous vapors
- Audiology, the study of hearing; a branch of medicine
- Autecology, the study of the ecology of any individual species
- Auxology, the study of human growth.
- Axiology, the study of the nature of values and value judgements

## B

- Bacteriology, the study of bacteria
- Balneology, the scientific study of baths, bathing and of their application to disease
- Bioclimatology, the study of the effects of climate on living organisms
- Geomorphology, or ecogeomorphology, the study of interactions between organisms and geomorphological processes
- Bioecology, the study of the relationship of organisms to each other and to their environment
- Biology, the study of life
- Biometeorology, the study of the effects of atmospheric conditions on living organisms
- Biotechnology industrial use of living organisms or their components to improve human health and food reduction
- Boxology is the study of schematic layouts, for example of corporate org charts.
- Bryology, the study of bryophytes

## C

- Campanology, the study and the art of bell ringing
- Cardiology, the study of the heart
- Cariology, the study of cells
- Cereology, the study of crop circles
- Cetology, the study of cetaceans - whales, dolphins, and porpoise
- Characterology, the study of character
- Christology, the theological study of redemption (christos > christein: to sacrament), not only speaking of Christianity but also extended to religion in general
- Chorology, the study of the relationship of biological or other phenomena to their locations
- Chronology the study of things in order of time or the study of time
- Climatology, the study of the climate
- Codicology, the study of the preparation of books and manuscripts (ink, paper, vellum etc)
- Coleopterology, the study of beetles
- Coniology, the study of dust in the atmosphere and its effects on plants and animals, also spelled "koniology".
- Conchology, the study of shells and of molluscs
- Cosmology, the study of the cosmos or our place in it.
- Cosmetology, the study of cosmetics and their use.
- Craniology, the study of the characteristics of the skull
- Criminology, the scientific study of crime.
- Cryology, the study of very low temperatures and related phenomena.
- Cryptology, the study of how to encrypt and decrypt secret messages
- Cryptozoology, the study of animals that may or may not be mythical
- Cynology, the study of dogs
- Cytomorphology, the study of the structure of cells
- Cytology, the study of cells

## D

- Deltiology, the study of, but more often the collecting of picture postcards
- Demonology, the study of demons
- Dendrochronology, the study of the age of trees and the records in their rings
- Dendrology, the study of trees
- Deontology, in ethics, the study of duty.
- Dermatology, the field of medicine that deals with the

skin
- ✓ Dermatopathology, the field of dermatological anatomical pathology
- ✓ Desmology, the study of ligaments
- ✓ Dialectology, the study of dialects
- ✓ Dipterology, the study of flies

E
- ✓ Ecclesiology, the study of Church architecture and decoration, or separately the study of the Christian Church
- ✓ Ecogeomorphology, or geomorphology, the study of interactions between organisms and geomorphological processes
- ✓ Ecohydrology, the study of interactions among organisms and the water cycle.
- ✓ Ecology, the study of the interrelationships between living organisms and their environment. Sometimes spelled "œcology".
- ✓ Ecophysiology, the study of the interrelationship between an organism's physical functioning and its environment
- ✓ Edaphology, a branch of soil science that studies the influence of soil on life.
- ✓ Egyptology, the study of the ancient Egyptians
- ✓ Electrophysiology, the study of the relationship between electric phenomena and bodily processes
- ✓ Embryology, the study of embryos
- ✓ Emetology, the study or knowledge of emetics
- ✓ Endocrinology, the study of internal secretory glands
- ✓ Enigmatology, the study of puzzles
- ✓ Enology (or Oenology), the study of wine and winemaking
- ✓ Entomology, the study of insects
- ✓ Enzymology, the study of enzymes
- ✓ Epidemiology, the study of the origin and spread of diseases
- ✓ Epistemology, the study of the nature and origins of knowledge
- ✓ Escapology, the practice of escaping from restraints or other traps.
- ✓ Eschatology, a branch of theology concerned with the final events in the history of the world or of mankind
- ✓ Ethnology, the study of race
- ✓ Ethnomusicology, the study of music in society, usually non-western music
- ✓ Ethology, the study of animal behaviour
- ✓ Etiology, same as Aetiology
- ✓ Etymology, the study of word origins
- ✓ Eulogy, the speech of praise
- ✓ Evolutionary biology, the study of the process of biological evolution
- ✓ Evolutionary psychology, the study of the process of (usually) human psychological evolution.
- ✓ Exobiology, the study of life in outer space

F
- ✓ Felinology, the study of cats
- ✓ Fetology, the study of the fetus, especially when within the uterus. Sometimes spelled foetology.
- ✓ Formicology, the study of ants
- ✓ Fungology, fungus + -ology, see mycology.

G
- ✓ Garbology - study of refuse and trash
- ✓ Gastrology or Gastroenterology- diseases of stomach and intestines
- ✓ Gemmology or Gemology, the study of gemstones and ornamental materials
- ✓ Genealogy (commonly misspelled and mispronounced as "genealogy"), the study of relationships within families particularly with a view to constructing family trees
- ✓ Gynecology, the study of genetic differences in relation to the environment
- ✓ Geobiology, the study of the biosphere and its relations to the lithosphere and atmosphere.
- ✓ Geochronology, the study of the age of the Earth
- ✓ Geology, the study of the Earth, describes the rocky parts of earth crust and its historic development.
- ✓ Geomorphology, the study of present-day landforms, traditionally on Earth but with increasing frequency on nearby planetary objects
- ✓ Gerontology, the study of old age
- ✓ Glaciology, the study of glaciers
- ✓ Grammatology, the study of writing systems. Also the study of deconstructive literary criticism, popularized in the 1960s by Jacques Derrida
- ✓ Graphology, the study of handwriting for the purpose of analysing the character of the writer
- ✓ Gynaecology or Gynecology, the study of medicine relating to women, or of women in general

H
- ✓ Hematology/Haematology, the study of blood
- ✓ Heliology, the study of the Sun
- ✓ Helioseismology, the study of vibrations and oscillations in the Sun
- ✓ Helminthology, the study of parasitic worms.
- ✓ Hepatology, the study of the liver; a branch of medicine
- ✓ Herbology, the study of the therapeutic use of plants
- ✓ Herpetology, the study of reptiles and amphibians
- ✓ Heterotopology, the study of true bugs.
- ✓ Hippology, study of horses
- ✓ Histology, the study of living tissues
- ✓ Histopathology, the study of the (microscopic) structure of diseased tissues
- ✓ Historiology, the study of the writings and practices of historians
- ✓ Horology, the study of making timepieces, measuring time and timekeeping (also the study of time)
- ✓ Hydrogeology, the study of underground water
- ✓ Hydrology, the study of water
- ✓ Hypnology, the study of sleep

I
- ✓ Ichthyology, the study of fish
- ✓ Ichnology, the study of fossil footprints, tracks and burrows
- ✓ Immunology, the study of the immune system
- ✓ Islamology, the study of the Islam

J
- ✓ Japanology, the study of Japanese people

K
- ✓ Karyology, the study of karyotypes (a branch of cytology)
- ✓ Killology, the study of human beings killing other human beings (Grossman's theory)
- ✓ Kinesiology, the study of movement in relation to human anatomy; a branch of medicine
- ✓ Kremlinology, the study of the Soviet Union

- ✓ Kymatology, the study of waves or wave motions

**L**

- ✓ Laryngology, the study of the larynx, or voice box; a branch of medicine
- ✓ Lepidopterology, the study of butterflies and moths
- ✓ Lexicology, the study of the significance and application of words
- ✓ Limnology, the study of freshwater environments, particularly lakes
- ✓ Lithology, the study of rocks
- ✓ Ludology, the study of video games
- ✓ Lymphology, the study of the lymph system and glands

**M**

- ✓ Malacology, the study of mollusks
- ✓ Mammalogy, the study of mammals
- ✓ Mereology, a branch of logic focusing on the study of part-whole relationships
- ✓ Meteorology, the study of weather
- ✓ Methodology, (properly) the study of methods
- ✓ Metrology, the study of measurement
- ✓ Microbiology, the study of microorganisms.
- ✓ Micrology, the science of preparing and handling microscopic objects for study.
- ✓ Mineralogy, the study of minerals
- ✓ Mixology, the study or skill of preparing mixed drinks.
- ✓ Molinology, the study of windmills, watermills and animal engines.
- ✓ Monadology, a book by Leibniz on the study of his theory of monads.
- ✓ Morphology, the study of forms that is used in several other fields (biology, linguistics, astronomy, etc.)
- ✓ Musicology, the study of music
- ✓ Mycology, the study of fungi
- ✓ Myology, the scientific study of muscles
- ✓ Myrmecology, the study of ants
- ✓ Mythology, the study of myths

**N**

- ✓ Nanotechnology, the study and design of machines at the molecular level
- ✓ Nanotribology, the study of friction at very small (atomic) scale
- ✓ Nematology, the study of nematodes
- ✓ Neonatology, the study of diseases and the care of newborn infants; a branch of pediatrics/paediatrics
- ✓ Nephology, the study of clouds
- ✓ Nephrology, the study of the kidneys and their diseases, a branch of medicine
- ✓ Neurology, the study of nerves
- ✓ Neuropathology, the study of neural diseases
- ✓ Neurophysiology, the study of the functions of the nervous system
- ✓ Nosology, the study of disease classification
- ✓ Numerology, the study of numbers (often in a non-mathematical sense)

**O**

- ✓ Oceanology, the study of oceans
- ✓ Odonatology, the study of dragonflies and damselflies
- ✓ Odontology, the study of the structure, development, and abnormalities of the teeth
- ✓ Oenology, the study of wine
- ✓ Omnology, the study of everything
- ✓ Oncology, the study of cancer
- ✓ Oneirology, the study of dreams
- ✓ Ontology, the study of existence
- ✓ Oology, the study of eggs
- ✓ Ophthalmology, the study of the eyes
- ✓ Organology, the study of musical instruments (not just organs; alternatively, the study of anatomical organs
- ✓ Ornithology, the study of birds
- ✓ Orology, the study of mountains and their mapping
- ✓ Orthopterology, the study of grasshoppers and crickets
- ✓ Osteology, the study of bones
- ✓ Otolaryngology, the study of the ear and throat; a branch of medicine
- ✓ Otology, the study of the structure, function, and pathology of the ear
- ✓ Otorhinolaryngology, the same as otolaryngology

**P**

- ✓ Paleontology, the study of ancient creatures
- ✓ Paleoanthropology, the study of ancient humans and human origin
- ✓ Paleoclimatology, the study of climate prior to the widespread availability of records of temperature, precipitation, and other instrumental data
- ✓ Paleoecology, the study of past environments using the fossils of plants and animals
- ✓ Palynology, the study of pollen
- ✓ Parapsychology, the study of paranormal or psychic phenomenon that defy conventional scientific explanations
- ✓ Parasitology, the study of parasites
- ✓ Pathology, the study of illness
- ✓ Pedology (soil study)
- ✓ Pedology (children study)
- ✓ Penology, the study of prison management and criminal rehabilitation.
- ✓ Personology, a variant of physiognomy
- ✓ Petrology, the study of rocks
- ✓ Pharmacology, the study of drugs
- ✓ Phenology, the study of periodic biological phenomena such as flowering, migration, breeding, etc.
- ✓ Phenomenology, the study and science of phenomena as distinct from the science of actual existence or being; also a movement founded by Husserl which studies conscious experience without its metaphysical concerns
- ✓ Phlebology, a branch of medicine that deals with the venous system
- ✓ Phonology, the study of vocal sounds
- ✓ Phrenology, the derivation of a person's character traits, by studying the shape of their skull
- ✓ Phycology, the study of algae
- ✓ Physiology, the study of bodies, usually of animals
- ✓ Phytology, the study of plants; botany
- ✓ Planetology, the study of planets and solar systems
- ✓ Planktology, the study of plankton
- ✓ Pneumology, a synonym of Pulmonology
- ✓ Pomology, the scientific study and cultivation of fruits
- ✓ Primatology, the study of primates
- ✓ Psychobiology, the study and psychology of organisms with regard to their functions and structures
- ✓ Psychology, the study of mental processes in humans
- ✓ Psychopharmacology, the study of psychotropic or

psychiatric drugs
✓ Psychophysiology, the study of the physiological bases of psychological processes
✓ Pulmonology is the specialty in medicine that deals with diseases of the lungs and the respiratory tract.

R
✓ Radiology, the study of rays, usually ionising radiation
✓ Reflexology, originally the study of reflexes or of reflex responses; but see also non-study list
✓ Rheology, the study of flow
✓ Rheumatology, the study of rheumatic diseases, a branch of medicine
✓ Rhinology, the study of the nose and its diseases
✓ Ripperology, the study of Jack the Ripper and the crimes associated with him

S
✓ Sarcology, a subsection of anatomy that studies the soft parts. It includes myology, angiology, neurology, and splanchnology
✓ Scatology, the study of feces
✓ Sedimentology, a branch of geology that studies sediments.
✓ Seismology, the study of earthquakes
✓ Selenology, the study of the moon
✓ Semiology the study of signs
✓ Serology, the study of blood serum
✓ Serpentology, the study of snakes
✓ Sexology, the study of sex
✓ Sindonology, the study of the Shroud of Turin
✓ Sinology, the study of China
✓ Sitiology, dietetics, the study of diet. Also, a treatise on diet. Also spelled "sitology"
✓ Sociology, the study of society
✓ Sociobiology, the study of the effect of evolution on ethology
✓ Somnology, the study of sleep, also: hypnology
✓ Somatology, study of human characteristics
✓ Soteriology the study of the doctrine of salvation, especially as related to Christianity
✓ Sovietology, the study of communist Soviet Union
✓ Speleology, the study or exploration of caves
✓ Sporalogy, a parody of astrology
✓ Stemmatology, a discipline that attempts to reconstruct the transmission of a text (especially a text in manuscript form) on the basis of relations between the various surviving manuscripts
✓ Stomatology, study of the mouth and its diseases.
✓ Sumerology, the study of the Sumerians.
✓ Symbology, the study and interpretation of symbols, or a set of symbols. Also used for types of barcodes
✓ Symptomatology, the study of symptoms
✓ Synecology, the study of the ecological interrelationships among communities of organisms

T
✓ Taxology, a synonym for taxonomy
✓ Technology, the study of the practical arts (but see above)
✓ Teleology, the study of ends or final causes
✓ Teratology, the study of wonders, or monsters
✓ Terminology, the usage and study of terms.
✓ Thanatology, the study of physical, psychological and social problems associated with dying.
✓ Thermology, the study of heat.
✓ Theology, the study in religion
✓ Tocology, the study of childbirth, sometimes spelled "tokology".
✓ Tonology, the study of intonation in speech
✓ Topology, the mathematical study of closeness and connectedness
✓ Toxicology, the study of poisons
✓ Traumatology, the study of wounds and injuries caused by accidents or assaults and their surgical treatment and repair; a branch of medicine
✓ Tribology, the study of friction and lubrication
✓ Trichology, the study of hair and scalp
✓ Typology, the study of classification

U
✓ Urology, the study and treatment of diseases of the urogenital tract, a branch of medicine. Sometimes spelled "urology".
✓ Ufology, the study of Unidentified flying object (UFO) phenomena.

V
✓ Vaccinology, the study of vaccines
✓ Venereology, the study of venereal diseases
✓ Vexillology, the study of flags
✓ Victimology, the study of victims of crime, often applied to characterizing the criminal
✓ Virology, the study of viruses
✓ Volcanology (also spelled volcanology), the study of volcanoes and related phenomena (traps)

X
✓ Xenobiology, the study of non-terrestrial life
✓ Xylology, the study of wood

Z
✓ Zooarchaeology, the study and analysis of animal remains at archaeological sites to reconstruct relationships between people, animals, and their environment (also see Archaeozoology)
✓ Zoology, the study of animals
✓ Zymology, the study of fermentation

## Scientific Instruments and Appliances

✓ Altimeter is a special type of aneroid barometer, used in measuring altitudes.
✓ Ammeter is an instrument to measure the strength of an electric current.
✓ Anemometer is an instrument to measure the velocity and find the direction of the wind.
✓ Audiometer is an instrument to measure differences in hearing.
✓ Barometer is used for measuring atmospheric pressure.
✓ Binocular is an optical instrument designed for magnified view of distant objects by both eyes simultaneously.
✓ Calorimeter is an instrument for measuring quantities of heat.
✓ Chronometer is a clock to determine the longitude of a vessel of sea.
✓ Clinical Thermometer is a thermometer for measuring the temperature of the human body.
✓ Calorimeter is an instrument for comparing intensities of

colour.

- ✓ Commutator is an instrument to change or reverse the direction of an electric current. In dynamo used to convert the alternating current into direct current.
- ✓ Computer is a technical device designed to find instantaneous solutions of huge and complex calculations based on the information already fed.
- ✓ Dynamo is a device for converting mechanical energy into electrical energy.
- ✓ Electroscope is an instrument for detecting the presence of electric charge.
- ✓ Galvanometer is an instrument for measuring electric current.
- ✓ Hydrometer is an instrument for measuring the relative density of liquids.
- ✓ Hydrophone is an instrument for measuring sound underwater.
- ✓ Hygrometer is an instrument for measuring the relative humidity of the atmosphere.
- ✓ Hygroscope is an instrument to show the changes in atmospheric humidity.
- ✓ Lactometer is an instrument for measuring the relative density of milk.
- ✓ Micrometer is an instrument used for accurately measuring small distances or angles.
- ✓ Manometer is an instrument to measure the pressure of gases.
- ✓ Magnetometer is an instrument used to compare the magnetic moments and fields,
- ✓ Mariner's Compass is an apparatus for determining direction, graduated to indicate 33 directions. The "N" point on the dial indicates the North Pole and the "S" point, South Pole.
- ✓ Microscope is an instrument for magnified view of very small objects.
- ✓ Periscope is an apparatus for viewing objects lying above the eye level of the observer and whose direct vision is obstructed. It consists of a tube bent twice at right angles and having plane mirrors at these bends inclined at angles of 45 to the tube.
- ✓ Photometer is an instrument for comparing the luminous intensity of the sources of light.
- ✓ Planimeter is a mechanical integrating instrument to measure the area of a plane surface.
- ✓ Pycnometer is an instrument used to measure the density and coefficient of expansion of liquid.
- ✓ Pyrheliometer is an instrument for measuring solar radiations.
- ✓ Pyrometers are thermometers to measure high temperatures.
- ✓ Quadrant is an instrument for measuring altitudes and angles in navigation and astronomy.
- ✓ Quartz clock is a highly accurate clock used in astronomical observations and other precision work.
- ✓ Radio micrometer is an instrument for measuring heat radiations.
- ✓ Rain gauge is an instrument for measuring rainfall.
- ✓ Refractometer is an instrument used to measure the refractive index of a substance.
- ✓ Resistance thermometer is used for determining the electrical resistance of a conductor.
- ✓ Salinometer is a type of hydrometer used to determine the concentration of salt solutions by measuring their densities.
- ✓ Seismograph is an instrument used for recording the intensity and origin of earthquake shocks.
- ✓ Scotograph is an instrument used to write without seeing anything or in darkness. It aids blind people to write.
- ✓ Screw gauge is used to measure size, length, or diameter of the object but cannot measure internal diameter.
- ✓ Sextant is an instrument used for measurement of angular distances between two objects.
- ✓ Spectroscope is an instrument used for spectrum analysis.
- ✓ Spectrometer is a type of spectroscope so calibrated to make it suitable for the precise measurement of refractive indices.
- ✓ Spherometer is an instrument used for accurately measuring the curvature of spherical objects.
- ✓ Sphygmomanometer is an apparatus for measuring blood pressure.
- ✓ Spring balance is used to measure the mass of a body. It is preferred only when quick but approximate determinations are to be carried out.
- ✓ Stereoscope is an optical device to see two dimensional pictures as having depth and solidity.
- ✓ Stethoscope is a medical instrument for hearing and analyzing the sound of heart and lungs.
- ✓ Stroboscope is an instrument used for viewing the objects moving rapidly with a periodic motion and to see them as if they were at rest.
- ✓ Tangent galvanometer is an instrument for measuring the strength of direct current.
- ✓ Telemeter is an apparatus for recording physical events happening at a distance.
- ✓ Teleprinter is a communication medium for automatic sending, receiving and printing of telegraphic messages from distant places.
- ✓ Telescope is an instrument for viewing distant objects as magnified.
- ✓ Television is an instrument used for transmitting the visible moving images by means of wireless waves.
- ✓ Thermometer is an instrument to measure the temperature.
- ✓ Thermoscope is used for measuring the temperature change (approximately) of the substances by noting the corresponding change in volume.
- ✓ Thermostat is an automatic device for regulating constant temperatures.
- ✓ Transistor is a small device which may be used to amplify currents and perform other functions usually performed by a thermionic value.
- ✓ Vernier is an adjustable scale with marking of 10 sub-divisions of one-tenth of an inch or any other suitable marking for measuring small sub-divisions of scale. Vernier calipers is used to measure length or diameter. It can also measure internal diameter of the cylinder.
- ✓ Viscometer is an instrument for measuring the viscosity, i.e. the property of resistance of a fluid to relative motion within itself.
- ✓ Voltmeter is an instrument to measure potential difference between two points.

## Important Laws and Principles

**Archimedes Principle:** The buoyant force on an object equals the weight of the fluid it displaces. In equation form, **Archimedes'** principle is

FB=wfl,size 12{F rSub { size 8{B} } =w rSub { size 8{"fl"} } } {}
11.30

Where FG size 12{F rSub {size 8{B} } } {} is the buoyant force and wfl size 12{w rSub { size 8{"fl"} } } {} is the weight of the fluid displaced by the object. **Archimedes'** principle is valid in general, for any object in any fluid, whether partially or totally submerged.

**Avogadro's Law:** Equal volumes of all gases under the same conditions of temperature and pressure contain equal numbers of molecules.

**Black Body Radiation:** A black body absorbs heat or radiates heat more quickly than any other body.

**Boiling Point:** It increases with the increase of pressure. It is the point at which the atmospheric pressure and pressure of the liquid becomes equal. At lower atmospheric pressure, liquid boils at lower temperature. That's why boiling point of water is lower at higher altitudes.
The presence of impurities also raises the boiling point of a liquid.

**Centre of Gravity:** A body will remain at rest only if the vertical line through the centres of gravity passes through the base of support of the body.

**Coulomb's Law:** The force between the two electric charges reduces to a quarter of its former value when the distance between them is doubled.

**Faraday's Laws of Electrolysis:** The amount of chemical change during electrolysis is proportional to the charge passed. The masses of substances liberated or deposited by the same quantity of electric charge are proportional to their chemical equivalents.

**Law of Conservation of Matter:** The law of conservation of matter summarizes many scientific observations about matter: It states that there is no detectable change in the total quantity of matter present when matter converts from one type to another (a chemical change) or changes among solid, liquid, or gaseous states (a physical change).

**First Law of Thermodynamics:** The **first law of thermodynamics** states that the change in internal energy of a system equals the net heat transfer *into* the system minus the net work done *by* the system. In equation form, the first law of thermodynamics is

$$\Delta U = Q - W$$

**Lenz's Law:** When an electric current is induced by a change in magnetic field, the induced current is always in such a direction that its magnetic field opposes the change of field which causes the induction.

**Mass - Energy Equation:** E = mc2, where E = quantity of energy released from the annihilation of matter of mass 'm', c = velocity of light. It implies that mass and energy are interchangeable.

**Newton's Law of Cooling:** The rate at which a body cools or loses its heat to its surroundings is proportional to the excess of mean temperature of the body over that of the surroundings, provided this temperature excess is not too large.

**Newton's Universal Law of Gravitation:** Every particle in the universe attracts every other particle with a force along a line joining them. The force is directly proportional to the product of their masses and inversely proportional to the square of the distance between them.

**Newton's Laws of Motion:**
**First Law:** A body at rest remains at rest, or, if in motion, remains in motion at a constant velocity unless acted on by a net external force. It is also called law of inertia.

**Second Law:** The acceleration of a system is directly proportional to and in the same direction as the net external force acting on the system, and inversely proportional to its mass.

**Third Law:** Whenever one body exerts a force on a second body, the first body experiences a force that is equal in magnitude and opposite in direction to the force that it exerts.

**Ohm's Law:** The current that flows through most substances is directly proportional to the voltage Vsize 12{V} {} applied to it.

**Rectilinear Propagation of Light:** Light travels in a straight line. Total internal reflection takes place when a ray of light tries to pass from a denser medium to a rarer medium at an angle of incidence more than the critical angle.

# Solar System

The solar system was formed approximately 4.6 billion years ago by the collapse of a giant molecular cloud. The mass at its centre collected to form the Sun and a flat disk of dust around it. This eventually formed the planets and other bodies of the solar system.
The solar system consists of the Sun, planets, dwarf planets, moons, and numerous smaller objects such as comets and asteroids.

## Basic Facts

| | |
|---|---|
| Stars | 1 |
| Planets | 8 |
| Dwarf Planets | 9 |
| Moons | 207 |
| Asteroids | 1199224 |
| Comets | 4402 |
| Age | 4.6 billion years |

- The combined mass of all the moons in the solar system is less than 0.1% of the Earth's mass.
- **99.86% of the solar system's mass is found in the Sun. The majority of the remaining 0.14% is contained within the eight planets.**

## The Sun

The Sun is the star at the centre of our solar system. It is an almost perfect sphere of super-hot gases whose gravity holds the solar system together. The energy produced by the Sun is essential for life on Earth and is a driving force behind the Earth's weather.
Sun is a ball of gases, it has 91% hydrogen and 8.5% helium.

| Basic Facts | |
|---|---|
| Age | 4.6 Billion Years |
| Type | Yellow Dwarf (G2V) |
| Diameter | 1,392,684 km |
| Equatorial Circumference | 4,370,005.6 km |
| Mass | $1.99 \times 10^{30}$ kg (333,060 Earths) |
| Surface Temperature | 5,500 °C |

- The Sun is all the colours mixed together, this appears white to our eyes.
- The Sun is composed of hydrogen (70%) and Helium (28%).
- The Sun is a main-sequence G2V star (or Yellow Dwarf).
- The Sun is 109 times wider than the Earth and 330,000 times as massive.
- The Sun's surface area is 11,990 times that of the Earth's.
- The distance between the Earth and the Sun is an Astronomical Unit (AU)

## PLANETS

### Terrestrial Planet

A terrestrial planet, telluric planet, or rocky planet is a planet that is composed primarily of silicate rocks or metals. Within the Solar System, the terrestrial planets are the inner planets closest to the Sun.

- Mercury
- Venus
- Earth
- Mars

### Gas giants

A gas giant is a large planet composed mostly of gases, such as hydrogen and helium, with a relatively small rocky core. The gas giants of our solar system are:

- **Jupiter** (composed mainly of hydrogen and helium)
- **Saturn** (composed mainly of hydrogen and helium)
- **Uranus is composed** largely of ices (water, ammonia and methane).
- **Neptune** composed largely of ices (water, ammonia and methane)

### Dwarf Planet

A dwarf planet is a planetary-mass object that does not dominate its region of space (as a true or classical planet does) and is not a satellite. That is, it is in direct orbit of the Sun and is massive enough to be plastic – for its gravity to maintain it in a hydrostatically equilibrious shape (usually a spheroid) – but has not cleared the neighborhood around its orbit of other material. The prototype dwarf planet is Pluto.

The nine bodies recognized or named as dwarf planets by the IAU

| | |
|---|---|
| • Ceres | • Orcus |
| • Pluto | • Quaoar |
| • Eris | • Gonggong |
| • Makemake | • Sedna |
| • Haumea | |

### The Planets and their distance from the Sun

| Name | Distance from Sun | Length of Year | Classification |
|---|---|---|---|
| Mercury | 57,909,227 km | 88 Earth days | Planet |
| Venus | 108,209,475 km | 225 Earth days | Planet |
| Earth | 149,598,262 km | 365.24 days | Planet |
| Mars | 227,943,824 km | 1.9 Earth years | Planet |
| Ceres | 413,700,000 km | 4.6 Earth years | Dwarf Planet |
| Jupiter | 778,340,821 km | 11.9 Earth years | Planet |
| Saturn | 1,426,666,422 km | 29.5 Earth years | Planet |
| Uranus | 2,870,658,186 km | 84.0 Earth years | Planet |
| Neptune | 4,498,396,441 km | 164.8 Earth years | Planet |
| Pluto | 5,874,000,000 km | 248.0 Earth years | Dwarf Planet |
| Haumea | 6,452,000,000 km | 283.3 Earth years | Dwarf Planet |
| Makemake | 6,850,000,000 km | 309.9 Earth years | Dwarf Planet |
| Eris | 10,120,000,000 km | 560.9 Earth years | Dwarf Planet |
| Orcus | 4.53 Billion km | 245 Earth | Dwarf |
| Quaoar | 6.54 Billion km | 288.83 | Dwarf |
| Gonggong | 10 billion km | 554.37 | Dwarf |
| Sedna | 130 billion km | 11390 | Dwarf |

***Why is it hot in summers and cold in winters?**

The sun is farthest away from the earth during July and closest to it during January. However, during the cold months of winters, the sunlight hits the earth at a shallow angle which spreads the light out. This prevents the earth from heating up and the short length of day does not allow enough sunlight to heat up the Earth either. Likewise, during the hot summer months the sunlight hits earth at a steep angle which means that more sunlight is received by particular points of earth that increases temperatures. The length of days are longer which allow the earth to absorb more heat for extended periods of time.

## The Four Equinoxes

a. ***Vernal Equinox*** - The dates of the vernal equinox are 20th or 21st March - the length of day and night are equal and the sun is right above the equator (celestial equator and ecliptic traverse/intersect). This marks the start of spring.

b. ***Autumn Equinox*** - The date of this equinox is September 23rd. This marks the start of autumn and the length of day and night are again the same.

c. ***Summer Solstice*** - The dates for this are either June 20th or 21st; it marks the start of summer and is the longest day of the year/shortest night.

d. ***Winter Solstice*** - The dates for this are either 21st or 22nd December; it marks the start of winter and is the shortest day of the year/longest night.

## Eclipse

An eclipse takes place when one heavenly body such as a moon or planet moves into the shadow of another heavenly body.

There are two types of eclipses on Earth: an eclipse of the moon and an eclipse of the sun.

## Lunar Eclipse

The moon moves in an orbit around Earth, and at the same time, Earth orbits the sun. Sometimes Earth moves between the sun and the moon. When this happens, Earth blocks the sunlight that normally is reflected by the moon. (This sunlight is what causes the moon to shine. Instead of light hitting the moon's surface, Earth's shadow falls on it. This is an eclipse of the moon - a lunar eclipse. A lunar eclipse can occur only when the moon is full.

A lunar eclipse can be seen from Earth at night. There are two types of lunar eclipses:

## Total Lunar Eclipses

- A Total Lunar Eclipse occurs when the moon and the sun are on exact opposite sides of Earth.
- Although the moon is in Earth's shadow, some sunlight reaches the moon.
- The sunlight passes through Earth's atmosphere, which causes Earth's atmosphere to filter out most of the blue light.
- This makes the moon appear red to people on Earth.

## Partial Lunar Eclipses

- A Partial Lunar Eclipse happens when only a part of the moon enters Earth's shadow.
- In a partial eclipse, Earth's shadow appears very dark on the side of the moon facing Earth.
- What people see from Earth during a partial lunar eclipse depends on how the sun, Earth and moon are lined up.

A lunar eclipse usually lasts for a few hours. At least two partial lunar eclipses happen every year, but total lunar eclipses are rare. It is safe to look at a lunar eclipse.

## Solar Eclipse

Sometimes when the moon orbits Earth, it moves between the sun and Earth. When this happens, the moon blocks the light of the sun from reaching Earth. This causes an eclipse of the sun, or solar eclipse. During a solar eclipse, the moon casts a shadow onto Earth.

There are three types of solar eclipses.

## Total Solar Eclipse

- A total solar eclipse is only visible from a small area on Earth.
- The people who see the total eclipse are in the center of the moon's shadow when it hits Earth.
- The sky becomes very dark, as if it were night.
- For a total eclipse to take place, the sun, moon and Earth must be in a direct line.

## Partial Solar Eclipse

- This happens when the sun, moon and Earth are not exactly lined up.
- The sun appears to have a dark shadow on only a small part of its surface.
- It takes the Sun 230 million years to orbit once around the Milky Way Center.

# Astronomy

## Facts:

### Moons of Every Planet:

| Planet | Number of Moons | Names |
|---|---|---|
| Mercury | 0 | |
| Venus | 0 | |
| Mars | 2 | Phobos and Deimos |
| Jupiter | 80 | Europa, Ganymede, Callisto, etc. |
| Saturn | 83 | Titan etc. |
| Uranus | 27 | Titania, Oberon, Miranda, Ariel, Umbriel, etc. |
| Neptune | 14 | Triton etc. |
| Earth | 01 | |

### Diameters of planets and their size comparisons:

**Mercury** = 48, 79.4 km
**Earth** = 12,742 km
**Mars** = 6,779 km - smallest planet
**Venus** = 12,104 km
**Neptune** = 49,244 km
**Jupiter** = 139,820 km – largest planet
**Uranus** = 50,724 km
Saturn = 116460 km

- There are 8 planets in our Solar System, Pluto is regarded as Dwarf Planet (it was confirmed in 2006).
- Galaxy is the system of millions and billions of stars, along with dust and gas. All of these are held together by the force of attraction.
- Our solar system is a part of galaxy.
- The name of our Galaxy is Milky Way. It is a spiral galaxy.
- Nearest Galaxy to the Milky Way is Andromeda.
- Hubble's classification of galaxies is also known as 'tuning fork'. It identifies three main galaxies: Elliptical, Spiral and Barred Spiral.
- Jupiter is the largest planet.
- Jupiter has the shortest day among all the planets.
- Venus is the hottest planet.
- Venus is known as the sister of Earth.
- Mercury is the smallest planet.
- Mercury has the shortest orbit of 88 days.
- Mercury and Venus are planets with no moon.
- Saturn has most moons, with a total of 83 moons.
- Neptune has the longest orbit of 165 years.
- Neptune is the coldest planet
- Meteorite is the debris of bodies like asteroids, comets, or meteoroids that reaches earth, moon, or planet surface after passing through the atmosphere.
- Earth's axis is tilted at 23.5 degrees. The diameter of Earth is 12,742km.
- Earth is closest to the Sun in January.
- Sun is classified as a yellow dwarf star.
- Stars are balls of gases.

- Terrestrial planets are composed of silicate rocks and metals; they are also known as inner planets, namely, Mercury, Venus, Earth, and Mars.
- Jovian planets are majorly composed of gases. They are the outer planets, namely, Jupiter, Saturn, Uranus, and Neptune.
- A nebula is a cloud of dust that is visible in the night sky as a luminous matter.
- Asteroids are small rocky objects of a much smaller size than a planet. Asteroids orbit the sun. An asteroid is a belt located between the orbits of Mars and Jupiter.
- Star constellation is the formation of an imaginary object by a group of stars. Some famous constellations are named Cygnus, Canis Major, Aquila, Aquarius, Gemini, Leo.
- Neil Armstrong was the first man on the moon. He landed on the moon on 21 July 1969 and stayed there for 6 hours and 39 minutes. The name of this mission was Apollo 11.
- Yuri Gagarin Soviet cosmonaut, was the first man in space in April 1961.
- Alan Shepard became the first American in space on 5 May 1961.
- Pham Tuan is the first Asian (Vietnam) in space. He flew aboard the Soyuz 37 mission.
- Valentina Tereshkova Soviet cosmonaut, became the first woman in space in 1963. Vostok 6 was the name of her mission.
- Laika, the dog, was the first animal to actually go into orbit. He was launched through Sputnik 2 mission on 3 November 1957.
- The Soviet Union launched the world's first artificial satellite Sputnik 1 on 4 October 1957.
- The first space shuttle launched by the United States on 12 April 1981 was named Columbia.
- Chandrayaan 1 (October 2008) and 2 (July 2019) are India's lunar missions.
- Diameter of Jupiter is 11 times diameter of earth.
- Size of earth was measured by Eratosthenes.
- Earth rotates around its axis and completes one rotation in 24 hours.
- Earth rotates around sun and completes one rotation in a year.
- Venus is the brightest planet and can be seen from the earth.
- Planets that can be seen from earth are mercury, Venus, mars, Jupiter, Saturn.
- Global positioning system, GPS, can locate person on the earth. It has satellites that monitor everything happening on earth. It consists of satellite, ground control network and user equipment.
- Venus can be easily seen from earth. Mars has a great spot which is frozen carbon dioxide
- Jupiter is considered the body guard of earth that protects earth from many comets and asteroids.
- Universe began in 10 to 20 billion years ago according to big bang theory.
- Sputnik was the first satellite sent into space.
- Meteorites fall from the sky to the earth.
- **LIGO stands for** "Laser Interferometer Gravitational-wave Observatory". It is the world's largest gravitational wave observatory and a marvel of precision engineering.

## Elements of the Earth

**Elements with their abundance in Earth's crust**

| Element | Abundance percent by weight | Abundance parts per million by weight |
|---|---|---|
| Oxygen | 46.1% | 461,000 |
| Silicon | 28.2% | 282,000 |
| Aluminum (metal) | 8.23% | 82,300 |
| Iron (metal) | 5.63% | 56,300 |
| Calcium | 4.15% | 41,500 |
| Sodium | 2.36% | 23,600 |
| Magnesium | 2.33% | 23,300 |
| Potassium | 2.09% | 20,900 |
| Titanium | 0.565% | 5,650 |
| Hydrogen | 0.14% | 1,400 |

Earth layers: crust, mantle, core. Crust and mantle have minerals while core is entirely made of metals, iron and nickel. Core is also called NiFe, Ni for nickel and Fe for iron.
Earth crust is also called lithosphere.

| Moon | |
|---|---|
| Distance from the earth (centre to centre) | 384,400 km |
| Distance from the earth (surface to surface) | 376,284 km |
| Diameter | 3,475 km |
| Orbital speed | 3.680 Km/s |
| Period of rotation on its axis | 28 days |

| Data about Earth | |
|---|---|
| Diameter at the equator | 12,755 km |
| At the poles | 12.712 km |
| Mean diameter | 12.742 km |
| Circumference at the equator at the poles (Meridian) | 40,075 km 40,024 km |
| Equatorial radius | 6,377 km |
| Total surface area | 510,100,500 sq km |
| Total land area (29.08)% | 148,950,800 sq km |
| Total water area (70.92% | 361,149.700 sq km |
| Total volume of the Earth | 5880 x 1021 tonnes |
| Total volume of the earth | 1.083,208,8400.000 cupic km (1083 x 1021 M3) |
| Mean depth of hydrosphere | 3,554 m |
| Mean distance from the sun | 149 407 00 km |
| Approximate age of the Earth | 4,600 million Years |
| Time of rotation on its own axis | 23 h 56 min & 409 s |
| Period of revolution round the Sun | 365 days 5 h 48 min and 45.51 s |
| Highest Point | Mt. Everest (8.848 m above mean sea level |
| Average distance of the sun from the earth | 149,598 m 900 km |
| Temperature of outer surface | 6,000°C |
| Interior temperature | 1,50,00,000°C |
| Equatorial Diameter | 1,391,980 km |
| Rotation period (Spinning) | 25 days 9 h 7 min |
| Travelling speed of the Sun's rays | 300, 00 km/s |
| Time taken by the sun's rays to reach the earth's surface | 499 Seconds |
| Age | About 5 billion years |
| Expected Life | About 10 billion Years |
| Chemical composition | Hydrogen 71%<br>Helium 26.5%<br>Other Elements 2.5% |

# QUICK EVERYDAY SCIENCE FACTS

- When sunlight passes through a prism it breaks into 7 colors. The process is called dispersion of light.
- When a ray of sunlight passes through raindrop it refracts.
- When sunlight reaches the surface of an ocean or sea it reflects.
- Sunlight takes 8 minutes and 20 seconds to reach the surface of Earth.
- Twinkling of stars is caused by refraction.
- The three primary colors are Red, Green, Blue.
- A secondary color is the one obtained by mixing any two primary colors.
- Color red has the longest wavelength and smallest frequency.
- The violet color has the shortest wavelength and highest frequency.
- The most abundant color on Earth is blue.
- Light travels fastest in a vacuum.
- Light travels at a speed of 186,000 miles per second or 299 792 458 meters per second.
- Sound cannot travel in a vacuum. Speed of sound decreases with the decrease in the density of the medium.
- Sound waves are longitudinal waves.
- Sound travels fastest through solids.
- Optic fiber is used in communication.
- An atom is composed of three particles, protons, electrons, and neutrons. Protons are positively charged, electrons are negatively charged and neutrons are uncharged. Protons play a role in determining the properties of an atom.
- The maximum density of water is at 4-degree Celsius.
- The freezing point of pure water is 0-degree Celsius.
- Heavy water freezes at 3.8 degree Celsius.
- Rocket propulsion is based on Newton's Third Law.
- The atmospheric pressure is low at high altitudes compared to areas of low altitude. That is why water boils below 100-degree Celsius at higher altitudes.
- Bromine is a non-metal that remains liquid at room temperature. Bromine is a red-brown liquid.
- Condensation is when a substance changes from gas to liquid.
- Vaporization is when a substance changes from liquid to gas.
- Sublimation is when a substance changes from solid to gas without going through the liquid phase. An example is dry ice.
- Battery converts chemical energy into electric energy.
- Motor converts electrical energy into mechanical energy.
- Energy due to the motion of object is called kinetic energy.
- Energy due to the position of the object is called potential energy.
- Salt is mixed in ice to melt it on icy roads. Salt lowers the freezing point of water.
- At extremely low temperatures, a large water body will freeze at last.
- Oxidation is a chemical reaction in which electrons are lost.
- Diamond and graphite are allotropic forms of carbon.
- A chemical change occurs when reactants rearrange their atoms after the reaction.
- Rusting of iron is a chemical change.
- Boiling of an egg is a chemical change because it causes permanent change.
- A physical change is when no new substance is formed rather a form of matter is changed. The melting of ice is a physical change.
- Galvanization of iron or steel is done to prevent rusting. In this process, zinc coating is done on the iron which protects it.
- Deliquescence is the property of a substance to absorb moisture from the air.
- Nuclear radiation is emitted by substances with unstable nuclei.
- An increase in the kinetic energy of a molecule causes an increase in vapor pressure upon heating. Wind energy is an ideal example of kinetic energy.
- Water inside a kettle is heated by convection.
- A person sitting near the fire receives heat by radiation.
- If a six feet person wants to see his/her full image on a plane mirror the minimum height of the mirror should be 3 feet (equal to one-half of the height).
- Nicotine is the chemical in cigarettes that causes addiction.
- A sonar uses ultrasonic waves to locate objects underwater.
- A body escapes the gravitational pull of earth if it is thrown upward at a velocity of 7 miles/sec or approximately 11 km/sec.
- Night vision is activated with the help of infrared rays.
- Artificial nuclear radioactivity can convert a basic metal into gold.
- Rodenticides are used to kill rats and mice.
- Insecticides are used to kill insects.
- Photodiode converts light into electric current.
- Rearview mirror of a vehicle is a convex mirror.
- Short-sightedness can be treated by a convex lens.
- Water alum is used to purify water. It coagulates the mud particles.
- Water gas is the mixture of carbon monoxide and hydrogen gas.
- Nitrous oxide ($N_2O$) is also called laughing gas.
- After being dissolved in water, detergent reduces the surface tension in water and helps to clean the clothes.
- Sunlight reaches a depth of 200m in an Ocean.

- Nitrogen in the air is fixed by nitrogen fixing bacteria in the soil, to form nitrates, which are available to plants to take up.
- Fertilizers have Nitrogen, Phosphorous, and Potassium (NPK) in them.
- The average adult body has a blood volume of about 5 liters.
- An average adult person breathes 15000-20000 liters of oxygen per day.
- Plasma is the fluid of the blood. Blood is composed of plasma, RBCs, WBCs, and platelets.
- Lithotripsy is the procedure used to eliminate kidney stones and gallstones through shock waves.
- Carbon dioxide is also produced by combustion of fuels, in factories, and in the home.
- Density is equal to mass per unit volume. As the density is decreased, volume increases.
- If pressure is applied, density of the gas molecules increases and its volume decreases.
- Wavelength is inversely proportional to frequency. High frequency means shorter wavelength and vice versa.
- There is no air in electric bulbs because filament heats up and it would burn in the presence of air. Burning occurs in the presence of oxygen. They are either vacuum filled or filled with inert gases.
- Soap is formed by the mixing of oil or fat with base like hydroxides of sodium and potassium. The process is called saponification.
- Quartz is the compound of silicon. It is one atom of silicon and 2 atoms of oxygen, $SiO_2$. It is found abundantly on earth surface.
- Darwin explained evolution through the natural selection. According to Darwin, only those species survived that could adapt to the environment and could get their food and living.
- According to Lamarck, the organs which are not used gradually and eventually fade off after generations and the organs which are used are evolved according to the kind of use. Due to this concept, Lamarck's theory is also called theory of use and disuse.
- Diesel engines do not use spark plugs to induce combustion, they have glow plugs to start the engine.
- Petrol or gasoline engine has 4 spark plugs.
- All motion is relative. Concept given by Galileo.
- Dry ice is used to produce cooling effect. It is solid form of carbon dioxide.
- Sunlight is composed of seven colors of light. When it passes through the prism, the dispersion occurs and it shows seven colors.
- Sources of antibiotics are bacteria and fungi.
- Helium is used in spaceship due to its lightness and inability to catch fire. Hydrogen catches fire readily.
- Chlorophyll gives green color to the leaves.
- Hydrogen is the lightest element.
- Speed can be calculated by dividing the distance covered with the time taken to cover that distance. Unit is meter per second.
- Weight is the product of mass and gravitational pull. Gravity is less on moon than on earth, so weight is also less.
- Value of gravity on earth is 9.8 $m/s^2$.
- Equation of energy, $e = mc^2$, was given by Einstein.
- When cars, or any object moves in the circular motion, there is a force acting towards the center of the circle. The force is called centripetal force. It keeps the motion in circular pattern.
- Camera uses convex lens.
- When there is less pressure in the atmosphere, the person has to breathe harder to get desired quantity.
- Diffusion is the process through which the gas particles move from the region of high concentration to the region of low concentration until the concentration becomes uniform.
- Friction is the force that develops between surfaces or objects when they slide pass each other. It prevents object from moving or reduces the speed. For example, when car is moving, friction acts on the surface of the wheels. Friction can be reduced using oils between the surfaces and through many other ways.
- Sodium Chloride is mineral salt present in sweat.
- Chemical name of common salt is sodium chloride.
- The small intestine absorbs the nutrient molecules.
- Water absorption takes place in large intestine.
- Chloroform was discovered by James Yong Simpson.
- Anorexia nervosa is eating disorder due to fear of getting fat.
- Compound used in antimalarial drug is chloroquine.
- Super conductor was invented by Heike Kimerling.
- Cyrogenics deals with low temperature.
- Sulphuric acid is used in the car battery.
- Organic chemistry is the study of organic compounds. Organic compounds are compounds which must have carbon and hydrogen in them.
- Car radiator is used for cooling the engine by transferring heat to the outside.
- Emf is the abbreviation of electromotive force.
- Plants are capable of producing food through photosynthesis. They are known as producers.
- The animals which depend on plants for food are called primary consumers like deer, goats, etc.
- Animals that get their food from primary consumers are called secondary consumers. Lion, bear, etc are secondary consumers.
- When plants and animals die, fungi and bacteria decompose their bodies to get food. These are called decomposers.
- HCl is abbreviation of hydrochloric acid.
- Silicon is a semiconductor.
- Nicotine is the substance present in tobacco which causes addiction.
- Bats produce ultrasonic waves which reflect back when they touch any object. This is how bats fly in dark.
- Complete combustion of coal produces carbon dioxide and incomplete combustion produces carbon dioxide plus carbon monoxide.

- Photosynthesis takes place faster in white light.
- Rockets that contain fossils are called sedimentary rockets.
- Coniferous forests have low biodiversity than tundra.
- Pasteurization procedure 161°C for 15 minutes
- Mass remains same, weight changes.
- X rays are produced when a stream of electrons strikes metal target in a xray tube.
- Fourth type of matter is plasma.
- Most efficient engine is electric engine.
- Earth crust is rocky.
- Chronometer is used to measure time.
- Osmosis is the diffusion of water molecules.
- Plastic is manmade substance.
- Carbon dioxide is used to extinguish fire.
- Manufacture of banaspati ghee is carried out through the process of hydrogenation. Hydrogen to add to the oils to make them saturated.
- Monsoon is the other name of rains.
- Mercury is the only metal that is liquid at room temperature.
- Mercury is used in the thermometers due to its high coefficient of expansion and high boiling point.
- Enthalpy is the measurement of energy in a thermodynamic system (the system we study). It is equal to the internal energy of the system plus the product of pressure and volume. Symbol of energy is H
  H (Enthalpy) = E (energy) + PV (Pressure volume)
- Solution is the homogeneous mixture of two or more substances.
- IR radiations by sun are absorbed by carbon dioxide.
- Microphone in phone converts sound energy to electrical energy.
- Velocity is measured by speedometer.
- Echoes are produced due to reflection of sound waves.
- Vaccines are used to prevent disease. Antibiotics are used to treat a disease.
- Gene is the functional unit of DNA.
- RNA is formed in the nucleus.
- Gene is the unit of heredity.
- There are 46 chromosomes in human body cells, 48 in monkeys.
- Dolly was the first cloned sheep.
- A test cross is used to find a genotype.
- Mitochondria are known as the Powerhouse of a cell.
- Double fertilization is a characteristic of an angiosperm.
- Plants give off oxygen and take in carbon dioxide during day time. The process is called photosynthesis.
- Plants take in oxygen and give out carbon dioxide during night. The process is called respiration.
- Pollination by birds called Ornithophily
- Pollination by wind is called Anempophily.
- Pollination by insects is called Entomophily.
- Self-pollination by flowers is called Autogamy.
- Hormones of plant
  - ➢ Gibberellin promotes growth by breaking dormancy of seeds.
  - ➢ Auxin is involved in apical dominance.
  - ➢ Cytokinin promote cell division.
  - ➢ Abscisic acid maintains dormancy and closes stomata.
  - ➢ Ethylene promotes fruit ripening.
- Magnitude of earthquake is measured by Richter scale and Intensity of earthquake is measured by Mercalli scale.
- It is easier to swim in sea water than in river water because density of water is higher in sea water which makes the body easy to bounce.
- Optical fiber is used in communication. It works on the principle of total internal reflection.
- Optical fiber consists of core, cladding, and coating. The core and cladding of fiber is made of plastic and glass (silica).
- Chemical name of bleaching powder is $Ca(ClO)_2$, washing soda is $Na_2CO_3$.
- Catalyst is the substance that speeds up the chemical reaction without being used itself. Nickel based catalyst can be used in separation of oxygen and hydrogen by splitting water.
- Silica is silicon dioxide which is major constituent of sand. Silicones are compounds of silicon with oxygen, hydrogen and carbon.
- Speed of sound in air is about 343 m/s. It depends on temperature and density of air.
- Amount of rain over the set period of time is measured with rain gauge or udometer.
- Baking soda: $NaHCO_3$
- When $NaHCO_3$ is heated, it gives off carbon dioxide.
- Stoma open when water in the guard cells increases which causes swelling of the guard cell.
- When water quantity is less, stomata closes, as guard cells become flaccid.
- The flower develops into fruit after fertilization. Fertilized ovule becomes seed. Ovary becomes fruit.
- Demography is the study of population.
- Cooking gas is made of propane, butane, or mixture of both. It means it has carbon and hydrogen. It is called LPG or liquid pressurized gas and is produced during oil refining process or can be extracted during natural gas production.
- Graphite is used in normal pencils, although they are called lead pencils but lead is not used in them.
- Black gold is an oil, black diamond is a stone.
- Heavy water used in nuclear reactors is called deuterium oxide. Deuterium is the isotope of hydrogen.
- Origin of species was written by Charles Darwin.
- Time for light to travel from sun to earth is 8 minutes and 20 seconds, or almost 499 - 500 seconds.
- Water has maximum density at 4 degree Celsius, further decrease in temperature results in freezing of water and decrease in density as the molecules move farther away from each other.
- Newton is the unit of force and weight.
- Elasticity is the ability of the substance to return to its original shape when force applied to it is removed. The applied force caused deformation in the size and shape of the object.
- Rubber is most elestic.

- Plastic substances donot regain their original shape or size even when the applied force is removed. Examples are plastic wrap, rolling steel, etc
- Plastic is also known as PVC or polyvinyl chloride. It is produced by polymerization of vinyl chloride.
- Inventor of tank is Lancelot de Mole.
- Dobson is the unit to measure ozone layer thickness.
- Measure of disorder in molecules of a substance is called entropy.
- Ores are materials from which useful mineral or metal can be obtained. Bauxite ore is primary source of aluminium.
- Suphur can be obtained from the ore, gypsum.
- Hematite, magnetite, limonite are some ores of iron.
- All insects have 3 pairs of legs.
- Drought is the condition of low or no rain which leads to water shortage.
- Carbon dioxide is used in fizzy drinks.
- Molasses are by-product of sugar industry. They still contain good amount of sugar.
- Solar energy is the cheapest source of energy.
- Gas used in refrigerator for cooling is freon or tetrafluoroethane.
- Mutations are changes in DNA sequence which may cause disorders. These are caused by various reasons, one of which is radiations.
- Sickle cell anemia, cystic fibrosis, some cancers, a type of thalassemia are caused by mutations.
- Speed of light in vacuum is about $3 \times 10^8$ m/s.
- Milk is pasteurized to kill bacteria and pathogens that may harm the human body.
- Noise intensity is measured in decibels.
- Vaccines are mostly made up of weakened or killed pathogens that cause the disease. They produce antibodies against that disease.
- Contraction ad expansion of steel occurs with change in temperature. It expands in hot weather and contracts in cold weather. Railway lines made of steel have gap between the lines to avoid any accident when the metal expands
- Parasites cause disease in other organism and get their food from them.
- Predators kill the prey to get their food. For example, lion is predator while deer is a prey.
- Scavengers get their food from dead organisms.
- Graphite and diamond are both allotropes of carbon. Diamond is a nonconductor of electricity whereas, graphite conducts electricity. The reason is graphite has free electrons to move while electrons in diamond cannot move freely.
- Artificial nuclear radioactivity can be used to convert basic metals into gold.
- Absolute alcohol is 99% alcohol and rectified spirit is 95% alcohol and 5% water.
- Petroleum is the mixture of hydrocarbons. Cracking of petroleum
- Dielectric constant of water at 18 is 80
- Magnetic flux unit is weber.
- Efficiency is measured in percentage.
- Electric lines of force are always parallel
- The times constant of circuit containing capacitance C and resistance R is RC.
- Tea has caffeine in it which is a stimulator.
- Pyrometer is used to measure very high temperature.
- Silver fish is an insect.
- Cyclone moves in circular motion.
- Ozone gas destroys germs in the air.
- Electrons are arranged on shells. First shell has 2 electrons. Second has 8, third has 18, and fourth shell has 34 electrons.
- TV remote control used infrared light or rays.
- Water expands when it freezes, so water pipes burst in extreme cold conditions.
- AIDS spread through sexual intercourse and blood transfusion of infected person through syringe reuse, etc.
- Ammonia gas is used for cooling purpose in industry and domestic setup.
- $CO_2$ is used for cooling in refrigerators under high pressure. It consumes much less energy than conventional CFCs.
- Conductors allow electricity to pass through them. Examples include iron, gold, silver mercury, copper, steel, aluminum, etc
- Insulators or non-conductors donot allow electricity to pass through them. Examples are rubber, glass, oil, plastic.
- Biodegradable materials decompose as the result of biological activity or enzyme. They are decomposed by bacteria or fungi.
- Non-biodegradable materials donot decompose. These include plastics. They are major concern for our environment and may cause health hazards.
- Tungsten is the hardest metal.
- Metallic element osmium is the densest substance on the earth.
- Isotopes have same atomic number but different atomic mass.
- Protium, deuterium, and tritium are isotopes of hydrogen.
- Biosensors detect the presence and concentration of an analyte such as biological molecule. It is used to detect glucose concentration or blood sugar level.
- X rays were discovered by Wilhelm Roentgen.
- Atomic number is the number of protons in an atom. Atomic mass is the number of proton plus neutron in an atom.
- Biotechnology utilizes biolbgical systems to produce useful products. Production of bread through baking using yeast is an example.
- Penicillin was the first antibiotic discovered. It is a milestone in the history of medicines. It was extracted from a fungus, a mold.
- Galileo performed experiments on gravity showing freely falling bodies but gravity laws were established by Newton few decades later.
- Sky is blue because blue light is scattered more than red light.
- Concave mirror is used to focus sunlight at one point.
- Benjamin Franklin is known as the father of electricity due to the invention of lightening rod.
- Latitude of earth is measured in degrees.
- Goiter is caused by the deficiency of iodine.
- The slowest planet in speed is Neptune.
- Materials for rain proof coats and tents have water proof property because of surface tension.
- Sulphur is used on match sticks as it catches fire and burns the stick.
- Nonmetal that remains liquid at room temperature is bromine.
- Coulomb is same as ampere-second

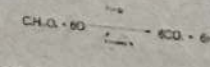
- Asthma is provoked by allergy.
- Mobile waves are radio waves.
- Greenhouse gases that cause global warming include carbon dioxide, methane, nitrous oxide, water vapours and chlorofluorocarbons.
- Atom has 3 subatomic particles namely proton, neutron, and electron.
- Proton and neutron are present inside the nucleus.
- Electrons orbit around the nucleus.
- Protons are positively charged, neutrons are neutral and electrons are negatively charged.
- Weight of proton is $1.672 \times 10^{-27}$ kg. Mass of neutron is slightly higher than proton and mass of electron is insignificant as compared to mass of proton and neutron.
- Scientific investigation steps are: make observation, form hypothesis, test hypothesis, make conclusion, ddvelop results.
- Transfer of heat can be done in three different ways. Conduction is transfer of heat through direct current.
- Convection is transfer of heat through the motion of liquid or gas.
- Radiation is transfer of heat in the form of thermal emission.
- Magnets are of three types: 1. Permanent magnet, 2. Temporary magnet, and 3. Electromagnet.
- Permanent magnets donot lose their magnetism. Examples include alloy of aluminum, nickel, and cobalt and ferrites.
- Temporary magnets develop when electric field is applied. Magnetism depends on strength of magnetic field. Their magnetism decreases with time when magnetic field is removed. Iron and its alloys, nails, paper clips, etc act as temporary magnets.
- When current is passed through metallic coil, electromagnet is produced. When current is removed, electromagnetism also vanishes.
- The big bang theory explains that there was a explosion of an unimaginable intensity in energy dense point which resulted in formation of galaxies and universe came into being.
- Loudness of sound depends on amplitude of the sound waves. Pitch of the sound depends on frequency of the sound waves.
- 71% of earth surface is water.
- Almost 97% of earth's water is in the form of oceans.
- 3% of the earth's water is freshwater but more than 2% of which is locked in the form of glaciers, polar ice caps, soil, etc. Less than 1% of water on earth is available as fresh water.
- Parthenocarpy is production of fruits without fertilization of ovules. So they are seedless fruits.
- Ovary develops into fruit. Ovule develops into seeds.
- Dengue virus spreads through mosquito named as Aedes.
- The factors that affect induced current are number of turns of the coil and change in magnetic field.
- Cloning is the production of identical copies of individuals with similar genetic makeup. It is biotechnological process.
- Quark, lepton, antiquark, antilepton are elementary particles of the matter. Quark is the smallest particle.
- Fats and oils are composed of fatty acids, and glycerol. They have carbon, hydrogen, and oxygen.
- Nitrogen cycle starts with fixation of nitrogen from the atmosphere. Nitrogen fixing bacteria convert nitrogen into compounds of nitrogen.
- Next step is nitrification. Nitrates are formed
- Third step is assimilation. This involves incorporation of nitrates in the tissues.
- Next step is ammonification and last step is denitrification. Nitrogen gas is produced into the air.
- Fossils fuels are obtained from the remnants of living organisms. Coal anx gas are examples.
- Rear view mirror of car uses convex mirror.
- Rusting occurs in the presences of oxygen and water.
- Very high temperature is measured using pyrometer.
- Round shape of rain drop is due to surface tension.
- Antibiotics treat bacterial diseases.
- Composition of chromosomes is proteins and DNA.
- Venus has the longest day.
- Value of g on earth is 9.8 $m/s^2$
- Oncology is the study of cancer.
- Gamma rays have highest energy.
- Compressibility is the ability of the substance to change volume and density as the result of applied pressure. Gas molecules are most compressible. When pressure is applied, density increases and volume decreases. Liquids are less compressible than gases and solids are least compressible.
- Drum of Photostat machine is made up of selenium.

## Uses of Noble gases:

- The oxygen tanks of divers have mixture of oxygen and helium.
- Argon is used in light bulbs.
- Gas filled in flying balloons is helium.
- Neon glows red, so it is used in advertising signals.
- Krypton is used in car head lights and laser surgery of eye.

| Acids | Bases | Salts |
|---|---|---|
| pH less than 7 | pH greater than 7 | pH equal to 7 |
| Sour taste | Bitter taste | Salty taste |
| Hydrochloric acid, acetic acid, sulphuric acid | Sodium hydroxide, calcium hydroxide | Sodium chloride, calcium sulfate |

| Respiration | Photosynthesis |
|---|---|
| Carbon dioxide is produced mainly by respiration. Here, sugars such as glucose are converted into carbon dioxide and water, giving out energy (exothermic) | The carbon dioxide is then absorbed by plants, by photosynthesis. Energy is absorbed (endothermic) from the sun, and used to build up simple sugars. |



## Properties of Different Types of Matter

| Solid | Liquid | Gas |
|---|---|---|
| • Definite shape<br>• Closely packed molecules<br>• Fixed volume<br>• Not compressible<br>• Highly dense<br>• Does not flow | • No definite shape<br>• Loosely packed molecules<br>• Fixed volume<br>• Not compressible<br>• Less dense | • No definite shape<br>• Very loosely packed molecules<br>• No fixed volume<br>• Compressible<br>• Least dense<br>• Random motion |

| | | |
|---|---|---|
| | than solids<br>• Flow, particles slide over each other | |

## Levels of Biological Organization

| | |
|---|---|
| Organelle | An organelle is a discrete structure of a cell having specialized functions. |
| Cell | Cell is the structural and functional unit of life. |
| Tissue | A tissue is a group of similar cells that perform a specific function |
| Organ | An organ is a group of tissues that perform a specific function or group of functions. |
| Organ system | Two or more organs working together in the execution of a specific body function. |
| Multicellular organisms | A multicellular organism is an individual living thing composed of many cells. |
| Species | A species is one of the basic units of biological classification. It refers to similar and inbreeding organisms. |
| Population | A population is the collection of organisms of a particular species living in a given geographic area or space. |
| Community | A community usually refers to a sociological group in a large place or collections of plant or animal organisms sharing an environment. |
| Ecosystem | Ecosystem is a contraction of "ecological" and "system", refers to the collection of biotic and abiotic components and processes that comprise and govern the behavior of some defined subset of the biosphere. Elements of an ecosystem may include flora, fauna, lower life forms, water and soil. |
| Biosphere | Biosphere is the outermost part of the planet's shell — including air, land, surface rocks, and water — within which life occurs, and which biotic processes in turn alter or transform. |

## IMPORTANT INFORMATION

1. Types of energy
   - Thermal energy - heat energy
   - Radiant energy - electromagnetic energy
   - Chemical energy - energy stored in bonds of molecules and atoms
   - Nuclear energy - atomic energy
   - Electrical energy - energy from flow of electric current/charge
   - Motion energy - mechanical energy
   - Sound energy - frequency heard and picked up by living beings
   - Elastic energy - mechanical potential energy
   - Gravitational energy - potential energy from pull of earth
   - Potential energy - potential stored in an object to do work
   - Kinetic energy - energy in object due to motion
   - Transverse energy - missing energy of particles that change places

## Achievements of great scientists

| | |
|---|---|
| Nuclear radiation | Marie Curie |
| Penicillin | Alexander Fleming |
| Electricity | Benjamin Franklin |
| Painkillers | Jean-Pierre Robiquet |
| Vaccines | Edward Jenner |
| Craters on Moon | Galileo Galilei |
| Natural Selection | Charles Darwin |
| Artificial Intelligence | John McCarthy |

## Measuring instruments

**Anemometer:** device that measures wind direction and speed.
**Rectifier:** converts alternating current (AC) to direct current (DC).
**Battery:** converts chemical energy into electrical energy
**Amplifier:** device that increases voltage, current or power of a signal.
**Galvanometer:** detects electric current.
**Voltmeter:** measures electric potential difference between two points in a circuit.
**Ammeter:** measures current in an electrical circuit.

## Classes of Hydrocarbons

**Alkenes:** also called olefins are a class of hydrocarbons (unsaturated compounds); they contain carbon and hydrogen bonds only and at least one carbon-to-carbon double bond.
**Alkanes:** also called paraffins are saturated hydrocarbons also made up of carbon and hydrogen, but all carbon bonds are single bonds.
**Alkynes:** unsaturated hydrocarbons; has carbon-to-carbon triple bonds.
Alkanes do not give Bayer's test. Alkenes and alkynes give Bayer's test. It is used to determine unsaturation in a compound.

## Forces

**Concurrent forces:** all the forces pass through one common point
**Non-concurrent forces:** which do not intersect or pass through common points
**Coplanar forces:** all forces act in one plane
**Collinear forces:** line of action of such forces lie along straight single line
Percentage of water in different water bodies
Oceans, Seas, Bays: 96.54%
Glaciers and Ice caps: 1.74%
Groundwater: 1.69%
Freshwater: 0.76%
Glacier water, groundwater and freshwater are considered usable freshwater for use by humans.
**Monsoons** are winds which carry rain and blow from south-west b/w May and September and from north-east b/w October and April. The former is called wet monsoon and latter is called dry monsoon.
**First Battery** Alessandro Volta was an Italian who discovered the battery around the end of 19th century. However, there was another battery made of ceramics that was discovered in Baghdad called the "Baghdad Battery". It was found in the village near Baghdad called Khu jut Rabu.
**Eugenics** It is the science of improving human species by breeding out disease and disabilities.Such breeding is done so that people who do not have diseases in their genes can mate and create a population that is disease-free.

## Periodic Table

Dimitri Mendeleev in Russia in 1869 and Lothar Meyer in Germany in 1870 simultaneously and independently discovered the elements and arranged them in table form. However, Mendeleev went ahead and predicted the properties of

elements that were yet to be discovered and gave them a place in the table.
Elements are arranged according to increase in the atomic number or proton number.
Horizontal rows in the periodic table are called periods. Vertical rows are called groups.
Most of the elements in the periodic table are metals.

### Facts related to animals

| Class | Features |
|---|---|
| Mammals | Give birth to young ones and feed milk to their babies. human, lion, etc. |
| Birds | Have light body and heavy feathers to fly. |
| Reptiles | Have scales on body. lizard, snake, etc |
| Amphibians | Slippery skin. Live on land and water. Frog and toad |
| Fish | Live in water. Have fins to swim, gills to breathe. |

- Vertebrate animals have backbone. E.g, human, cat, dog, lion, birds, etc
- Invertebrates do not have backbone. E.g, ants, insects, earthworm, etc.
- Cold blooded animals adjust their body temperature according to the external temperature. These include fish, reptiles, and amphibians.
- Warm blooded animals have constant body temperature. Mammals and birds are warm blooded animals.
- Animals like lion, tiger, panther, cheetah, etc. are included in cat family.
- Tiger is the largest member of cat family.
- Lion is the only member of cat family that hunts in group.
- Blue whale is the largest sea animal. It is a mammal and has lungs. It has nostrils called blowholes through which air enters.
- Birds which feed on marine food have a gland named as rectal salt gland through which they remove salt from body.
- Fish breathe through special organ called gills.
- Heart of frog has three chambers, two atria, and one ventricle.

## Environment and Pollution

### Composition of air

| Gas | Abundance in air |
|---|---|
| Nitrogen | 78% |
| Oxygen | 21% |
| Argon | 0.93% |
| Carbon dioxide | 0.04% |
| Other gases | Small amounts |
| Water vapors | Depends on humidity levels |

Ozone layer absorbs all the harmful ultraviolet rays from sunlight that can cause diseases like skin cancer. Ozone layer is present in stratosphere of earth's atmosphere.
Layers of atmosphere are troposphere, stratosphere, mesosphere, thermosphere, and exosphere.
Ozone layer is present in stratosphere.
75% of atmosphere is composed of troposphere.
Mesosphere protects earth surface from hit by meteoroids.
Ionosphere is ionized by solar radiations. It is composed of thermosphere and portions of exosphere and mesosphere.
Radio waves pass through ionosphere.
50% of earth crust including water on earth and atmosphere is oxygen.
Desert is 33% of land and mountains are 24% of total land on earth.

### Depletion of ozone layer by Chlorofluorocarbons

Chlorofluorocarbons, CFCs, catalyse the conversion of ozone to oxygen.
CFCs go high up in the atmosphere where they react with ozone to form oxygen (so ozone is depleted).

### Some common atmospheric pollutants and their sources

| Pollutant | Source |
|---|---|
| Carbon monoxide | incomplete combustion of carbon-containing substances |
| Methane | bacterial decay of vegetable matter |
| Nitrogen oxides | lightning activity and internal combustion engines |
| Ozone | photochemical reactions responsible for the formation of photochemical smog |
| Sulphur dioxide | volcanoes and combustion of fossil fuels |
| Unburned hydrocarbons | internal combustion engines |

The hazardous wastes of industries result in contamination of ground water which is the major health hazard.
Chlorofluorocarbons, that result in ozone layer depletion and global warming, are produced refrigerators, air conditioners, and other electric appliances.
Acid rain caused by Sulphur dioxide and nitrogen oxides. These oxides form acids with water vapors and result in acid rain.

## Facts related to Human body

- Red blood cells are produced in bone marrow and are destroyed in spleen.
- Platelets help in clotting of blood, stopping the blood flow.
- Normal temperature of human body is 37°C.
- Normal blood pressure is 120/80 mmHg
- Normal sugar level is less than 140mg/dL
- Glucose is the source of energy in the human body.
- Human brain is 73% water.
- Largest cell in the human body is ovum or egg.
- Longest cell in the human body is nerve cell.
- Fever is also called pyrexia.
- Blood in body is approximately 5 liters and 10% of adult's weight.
- Drugs are excreted through kidneys mostly.
- Neonate: 0 to 2 months
- Infant: 0 to 1 year
- Toddler: 1 to 3 years
- Child: 3 to 12 years
- Adolescence: 12 to 18 years
- Tonsils are located in throat.
- Human blood is an example of tissues.
- The energy in our body is in the form of ATP molecules.
- ATP is the abbreviation of adenosine triphosphate.
- Hypothermia is the condition in which body temperature drops down from 37°C or 98.60F

- Hyperthermia is the condition in which body temperature rises above 37°C or 98.60F.
- Oxygen makes up to 65% of total body mass.
- The human body grows fastest between the ages of 10-16.
- Biopsy is done by removing cells from the body to determine whether cells are cancerous or not.
- Wisdom teeth come between age of 17 and 25. They continue to come out till the age of 30.
- Heparin stops blood clotting. It is the natural anticoagulant present in our body.
- Pulse rate in humans is 72 beats per minute.
- Causes of jaundice are virus including hepatitis, alcohol consumption, autoimmune disorder, or metabolic disorder.
- Skin has three layers, epidermis, dermis, and subcutaneous fat.
- Epidermis produces pigment and protect immune system.
- Dermis contains hair follicles and sweat glands. It is provided with nerve endings. Sensations are felt by dermis. Subcutaneous layers is made of connective tissue, fats, and longer blood vessels.
- There are 4 types of teeth used for different purposes. Incisors: There are 4 incisors used to cut food, Canine: There are 4 canines used to grind food, Premolars: Used to crush food, Molars: Used to grind food.
- Fluorine is essential for teeth growth and prevents tooth decay from plaque and sugar.
- Cavity is the hole in teeth which forms due to consumption of sugar and sugary items.
- Tooth decay due to the deficiency of fluorine. Tooth decay is also called dental caries.
- Humans can hear within the range of 20Hz-20,000Hz
- Calcium phosphate is the major component of bones and teeth.
- Iron is the main component of hemoglobin. Hemoglobin transports oxygen. It gives red color to the blood.
- Reb blood cells are involved in transport of oxygen because they have hemoglobin. White blood cells fight against diseases. Platelets are involved in blood clotting.
- Skin is the largest organ in the human body.
- The largest gland in the body is the Liver.
- Weight of male brain is 1345 grams or 4.8 ounces.
- Weight of female brain is 1222 grams or 4.4 ounces.
- Weight of human heart increases with age. Adult human heart weights around 280 to 290 grams. Woman heart weighs slightly lighter.
- Largest bone in human body is femur of leg.
- Smallest bone is stapes in ear.
- Blood is approximately 7% of the human body weight.
- Skin has three layers, epidermis, dermis, and subcutaneous fat.
- Epidermis produces pigment and protect immune system. Dermis contains hair follicles and sweat glands. It is provided with nerve endings. Sensations are felt by dermis. Subcutaneous layers is made of connective tissue, fats, and longer blood vessels.
- Our brain uses glucose as source of energy.

| Blood group | Antigen(s) present | Antibody/antibodies present | Rhesus factor |
|---|---|---|---|
| A +ve | A | B | Present |
| A -ve | A | B | Absent |
| B +ve | B | A | Present |
| B -ve | B | A | Absent |
| AB +ve | A and B | None | Present |
| AB -ve | A and B | None | Absent |
| O +ve | None | A and B | Present |
| O -ve | None | A and B | Absent |

O –ve are universal donors and AB +ve are universal recipients. Rhesus factor is the protein present on the outside of red blood cells. If it is present, blood group is positive. If this protein is not present, blood group is negative.
Lungs are least susceptible to harmful radiations.
Appendicitis is the inflammation of appendix. Appendix is present in lower abdomen on the right side. It apparently has no use. It is removed in case of swelling and pain.
Heartbeat of baby starts at 6th week of conceiving.

## Systems in the Human Body:

i. Skeletal – system of bones:
Functions of bones and skeleton is to give support and protection to the body. Bones protect vital organs from shock. They also aid in movement.
The shoulder bone is called scapula.
There are 206 bones in the human body. 300 bones in newly born infants.
Humerus, Radius, and Ulna bone are located in the arm.
Femur, Tibia, and Fibula are the bones found in the leg.
Metacarpals are bones of fingers of hands and metatarsals are bones of fingers of feet.
The femur/Thighbone is the longest and strongest bone.
There are 33 bones in the spinal column.
Physiotherapy deals with immobility of joints and muscles.

ii. Muscular – system of muscles and muscle fibers

**Comparison of different types of Muscles**

| | Skeletal | Cardiac | Smooth |
|---|---|---|---|
| Appearance | Striations | Striations | Not striated |
| Cell structure | Multiple nuclei | Single nucleus | Single nucleus |
| Cell shape | Long, cylindrical, unbranched | Shorter branched cells | Long unbranched cells that tapper at each end |
| Location | Attached to skeleton | Heart | Structures and organs inside the body cavity |

## Movements of skeletal muscle

- Contraction (shorten)
- Extension (lengthen)

| Categories | Actions |
|---|---|
| Extensor | Increases the angle at a joint |
| Flexor | Decreases the angle at a joint |
| Abductor | Moves limb away from midline of body |
| Adductor | Moves limb toward midline of body |
| Levator | Moves insertion upward |
| Depressoe | Moves insertion downward |
| Rotator | Rotates a bone along its axis |

| Sphincter | Constricts an opening |
|---|---|

iii. Nervous – system comprising of brain and spinal cord
A nerve cell is called a neuron.
Nervous system is made up of brain, spinal cord, and nerves.
Central nervous system is composed of brain and spinal cord.
Medulla oblongata is present at the base of the brain and it plays an essential role in passing messages between brain and spinal cord.
Hypothalamus controls body temperature.
Cerebrum is the largest part of the human brain.

iv. Endocrine – system of feedback via hormones

| Gland | Location | Hormone and function |
|---|---|---|
| Pituitary | In brain | Master gland of the body as it controls activity of other glands. It produces variety of hormones. |
| Thyroid | In throat | Produces thyroxin and calcitonin. They are involved in metabolic processes. \|Calcitonin controls calcium level. Thyroxin contains iodine. |
| Adrenal | Above the kidney | Outer cortex produces steroid hormones. Medulla produces adrenaline and noradrenaline. Adrenaline and nor adrenaline are a part of peripheral nervous system and have variety of functions. |
| Pancreas | In abdomen | Produces insulin and glucagon which are involved in glucose or sugar metabolism. Insulin production is decreased or impaired in diabetes. |
| Ovaries | In lower abdomen (only in females) | Produce hormones that are involved in reproduction and development of secondary sex characters. |
| Testis | Male hormones | Testosterone is produced which is involved in secondary sex characters of male. Sperm production. |

- Prolactin, produced by pituitary gland, stimulates production of milk.
- Milk is produced through mammary gland present in mothers.
- Adrenaline rush is the condition when adrenal gland produces increased amount of adrenaline which results in sweating, high heart rate, rapid breathing, etc.
- Diabetes is caused by insufficient or no release of insulin from pancreas. Insulin metabolizes sugar.
- Addison disease due to overproduction of adrenocorticotrophic hormone.
- Largest gland is liver.

v. Cardiovascular – heart and pumping of blood
Human heart has 4 chambers. Upper two chambers are called atrium (plural: atria) and lower two chambers are called ventricles.

| Structures and Functions of Heart | |
|---|---|
| **Structure** | **Function** |
| Septum | Prevents mixing of oxygenated blood and deoxygenated blood |
| Aorta | Carries oxygenated blood to the organs |
| Pulmonary artery | Carries deoxygenated blood to the lungs |
| Pulmonary vein | Carries oxygenated blood from the lungs to the heart |
| Superior vena cava | Returns deoxygenated blood from head and arms to the heart |
| Inferior vena cava | Returns deoxygenated blood from lower limbs and organs to the heart |

- Left side of heart has oxygenated or clean blood and right side has deoxygenated or dirty blood.
- Aorta carries blood away from heart from left ventricle. It contains oxygenated blood and divides into arteries to carry oxygenated blood to different organs.
- Deoxygenated blood from right ventricle moves to the lungs via pulmonary artery where it is purified and reaches to left atrium via pulmonary vein.
- Arteries have the thickest walls. Arteries carry away oxygenated blood from the heart except for the pulmonary artery.
- Pulmonary artery carries deoxygenated blood from heart to lungs.
- Pulmonary vein carries oxygenated blood from lungs to heart.
- Veins bring deoxygenated blood back to the heart except for a pulmonary vein.
- Capillaries provide blood to the cells. Veins and arteries divide and subdivide to form capillaries with smaller diameter.
- Lifespan of a red blood cell is 12 days and white blood cell is 5-21 days. Life span of platelets is 8 to 12 days.
- Function of pacemaker is to control the heartbeat.
- Fluid of blood is plasma.
- Red blood cells are also called erythrocytes and white blood cells are also called leukocytes. Platelets are also called thrombocytes.
- ECG is used to examine the pattern of heart beat of the patient.
- Systolic pressure is the pressure when heart beats and diastolic is the pressure when heart is at rest. Normal blood pressure is 120/80. 120mmHg is systolic pressure and 80mmHg is normal diastolic pressure.
- Heart attack is caused due to several reasons. One reason is increase in blood pressure.
- Risk of blood pressure increases after the age of 60 years.

vi. Lymphatic – related to immunity of the body
Immune system protects against diseases. It consists of thymus, bone marrow, and lymph nodes.
Immunity is the defense system against any foreign particle that enters the body including viruses, bacteria, and other pathogens.

## 3 lines of defense exist in our body

I. First line includes outer barriers like skin, stomach acids, mucus, tears, etc
II. Second line being non-specific immune system like macrophages and dendritic cells
III. Third line being the specific immune system made of lymphocytes like B- and T-cells, which are activated mostly by dendritic cells

**Components of immune system include**

i. lymphocytes, B and T lymphocytes
ii. antibodies

**Lymphocytes**

B lymphocytes produce antibodies which are secreted into the lymph and blood where they circulate freely.
T cells can only recognize viral antigens outside the infected cells
B cells activate the immune system to destroy the pathogens.
The main difference between T cells and B cells is that T cells recognize viral antigens outside the infected cells whereas B cells can recognize the surface antigens of bacteria and viruses

**Antibodies**

Antibodies are special type of proteins that work against antigens. They are called immunoglobulins.
Antibodies are produced in B lymphocytes and are secreted into the lymph and blood where they circulate freely.
Antiserum is the serum containing antibodies.

T cells are matured in thymus.

vii. Respiratory – breathing and involves lungs
Lungs are called blood cleansing organ.

Adequate amount of oxygen is necessary for efficient breathing. Oxygen goes in through the nostrils towards the lungs and carbon dioxide comes out during breathing.
Alveoli or air sacs are present in the lungs.

Diaphragm is thin skeletal muscle sheet present between chest and stomach. It is called the floor of chest.

Diaphragm moves up and down during breathing.

viii. Digestive – digestion of food and attainment of nutrition from it

Digestive system starts with mouth. The alimentary canal consists of esophagus, stomach, small intestine, and large intestine.

Accessory organs in digestion are salivary glands, liver, gall bladder, and pancreas.

Liver produces bile which is stored in gall bladder and released in small intestine. Bile is involved in digestion of fats.
Salivary glands produce saliva which has enzymes. It has starch digesting enzyme amylase.

Pancreas produces pancreatic juice which has variety of food digesting enzymes. It is released into small intestine.

| Organ of digestive system | Type of movement | Digestive secretions added | Type of food broken down |
|---|---|---|---|
| Mouth | Chewing | Saliva | Starch |
| Esophagus | Peristalsis | No secretion | None |
| Stomach | Muscles move | Stomach acid and digestive enzymes | Proteins |
| Small intestine | Peristalsis | Small intestine digestive juice | Starches, proteins, and carbohydrates |
| Pancreas | None | Pancreatic juice | Carbohydrates, fats, and proteins |
| Liver | None | Bile | Fats |
| Large intestine | Peristalsis | none | Bacteria in large intestine may also break food particles |

Villi are finger like projections present in human small intestine. They increase the surface area of the intestine and thus aid in digestion of food and secretion of enzymes.
Liver produces bile which aids in digestion and gives yellow brown color to the stool.

ix. Urinary – how water is discarded from the body and role of kidneys in retention of important elements

Excretion is the removal of urine, sweat, and carbon dioxide from body.
The kidney removes waste products from the body in the form of urine.
Kidneys produce urine. Ureter carries urine from kidney to bladder.
Ureters open in bladder.
Bladder stores urine. Urine is excreted through urethra.
Functional and structural unit of kidney is nephron.
Outermost darkest part of kidney is called cortex and inner part is called medulla.
Dialysis is the process of cleaning blood in case of impaired kidney or kidney failure.

x. Reproductive – making of offspring and involves genitals of both genders

# COMPUTER SCIENCE

## MICROSOFT OFFICE

### MICROSOFT WORD MCQs

**Right Answers are given in BOLD.**

1. Selection of text means?
   A. Select a word
   B. Select an entire sentence
   C. Select whole document text
   **D. All of above**

2. We can search characters & words and symbols in Microsoft word by using _____ command.
   A. Ctrl + R **B. Ctrl + F**
   C. Ctrl + F5 D. None of above

3. Drop Cap means
   A. Small Caps B. Title case
   C. All Caps **D. None of above**

4. On which page the header or the footer is printed by default?
   A. on the first page B. on the second page
   **C. on every page** D. All of the above

5. __ key is used to start a new paragraph in MS-Word.
   A. Tab key **B. Enter Key**
   C. Shift + Enter D. Ctrl + Enter

6. By using _____ toolbars we can change Fonts and their sizes?
   A. Standard **B. Formatting**
   C. Reviewing toolbar
   D. None of these

7. Which one of the following toolbar, provides categorized options?
   **A. Menu bar** B. Scroll Bar
   C. Standard toolbar D. Status bar

8. In Microsoft word which option is used to close the file in the File pull-down menu?
   A. Exit B. Quit
   **C. Close** D. None of the above

9. In Microsoft word function of Ctrl + B is
   A. to converts selected text into the next larger size of the same font
   B. to use a page break
   **C. to makes the selected text bold**
   D. to underline the selected text

10. The function of shortcut key CTRL+R in MS-Word is _____
    A. Replace the text
    **B. Align the selected text to the right**
    C. Close the current window
    D. None of these

11. What is the extension of files created in Ms-Word 97- 2003?
    A. .dot **B. .doc**
    C. .docx D. None of the above

12. In Microsoft word the function shortcut key CTRL+W is.
    A. Open a new file
    B. open the print dialog box
    **C. close the current window**
    D. None of these

13. Which one of the following shortcut keys is used for spell check in MS-Word?
    A. Ctrl + F2 B. F2
    **C. F7** D. F10

14. The minimum number of rows and columns a word table can have is
    A. Zero
    B. 2 rows and 1 column
    C. 2 rows and 2 column
    **D. 1 row and 1 column**

15. In MS-Word shortcut Ctrl + L is used to
    A. Align the selected text to the right
    B. Copy the selected text
    C. to copy the selected text
    **D. Align the selected text to left**

16. CTRL + RIGHT ARROW can be used to
    **A. Move the insertion point to the beginning of the next word command**
    B. Move the insertion point to the beginning of the whole document
    C. move the insertion point to the end of the word document
    D. to select the paragraph

17. Why are headers and footers used in the document?
A. To mark large document more readable
B. To mark the starting and ending of a page
C. To enhance the overall appearance of the document
**D. To allow page headers and footers to appear on document when it is printed**

18. In a Microsoft word document we can set a maximum of _____ lines for a drop cap?
**A. 10** B. 12
C. 25 D. None of them

19. The default number of lines to drop for drop cap?
**A. 3** B. 05
C. 15 D. 20

20. In the formatting toolbar what is the smallest font size available in the Font Size tool?
**A. 8** B. 10
C. 11 D. None of them

21. A character that is raised and smaller above the baseline is known as
A. Raised B. Outlined
C. subscript **D. Superscript**

22. In the formatting toolbar what is the largest font size available in the Font Size tool?
A. 10 B. 65
C. 20 **D. 72**

23. In an MS-Word document, the minimum number of rows and columns is
**A. 1 and 1** B. 2 and 1
C. Zero D. None of the above

24. Thesaurus tool in MS Word is used for...
A. Spell Check
**B. Synonyms and Antonyms words**
C. Grammar
D. None of them

25. Drop Caps are used in the document?
A. To drop all the capital letters
B. To change the selected text in capital letter / Title case
**C. To begin a paragraph with a large dropped initial capital letter**
D. None of These

26. A bookmark is an item or location in a document that you identify a name for future reference. Which of the following task is accomplished by using bookmarks?
A. To mark the starting page of the document
**B. To quickly jump to a specific location in the document**
C. To add a link in a document
D. None of these

27. A template stores:
A. Auto text entries
B. Customized word command setting
C. Graphics, text, styles, macros
**D. All of above**

28. What do you mean by a vertical separation between columns?
A. Orientation B. Gutter
**C. Margin** D. Index

29. Which of the following is an absolute cell reference?
A. A1 **B. $A$1**
C. !A!! D. #a#1

30. Which key is pressed three times for the selection of a sentence?
**A. F8** B. F7
C. F1 D. F12

31. Which key is used to save as a file in a word document?
A. F8 B. F7
C. F1 **D. F12**

32. The EXT indicator on status bar of MS Word indicates____
A. It indicates whether the external text is pasted on a document or not
B. It indicates whether extended add-ons are installed on MS Word or not
**C. Whether Extended Selection mode is turned on or off**
D. None of These

33. MS OFFICE is an Application Software
**A. True** B. False

34. What of the following feature is used to inserts the contents of the Clipboard as text without any formatting in MS Word?
**A. Paste Special**
B. Page Layout
C. Paste D. None of above

35. ____ is the place to the left of the horizontal scroll bar?
A. Split button **B. View buttons**
C. Scroll buttons D. All of the above

36. Which file starts MS Word 2003?
A. Word.exe B. Msword.exe
C. Word2003.exe **D. Winword.exe**

37. In Microsoft word document how many ways you can save a document?
**A. 3** B. 5
C. 2 D. None of the above

38. If you want to keep track of different editions of a document which features will you use?
A. Editions **B. Versions**
C. Track Change D. All of above

39. Background color or effects applied on a document is not visible in
A. Outline view
B. Full-Screen view
C. Web layout view
**D. Print Preview**

40. What is a portion of a document in which you set certain page formatting options?
A. Page Setup **B. Section**
C. Page D. Document

41. You can apply the borders that can be applied to:
A. Cells B. Text
C. Paragraph **D. All of the above**

42. Which of the following is not a type of page margin?
A. Right **B. Center**
C. Left D. Top

43. The default left margin in Microsoft Word 2010 document?
**A. 1"** B. 1.25"
C. 2.5" D. None of them"

44. A Margen that is added to the binding side of a page when printing is called
A. Narrow Margin **B. Gutter Margin**
C. Binding Margin D. Left Margin

45. How many types of orientation available in the page setup of a word document.
**A. 2** B. 3
C. 5 D. All of the above

46. Which of the following is not a font style?
A. Bold B. Italics
**C. Superscript** D. All of above

47. Which key you will press to disable extended selection mode?
A. Dell B. F8
**C. Esc** D. Enter

48. 4. What does the EXT indicator on the status bar of MS Word indicate?
A. It indicates whether the external text is pasted on a document or not
B. It indicates whether extended add-ons are installed on MS Word or not
**C. It indicates whether Extended Selection mode is turned on or off**
D. None of the above

49. The maximum font size which you can apply for any character in a Microsoft word document is
A. 72 **B. 1603**
C. 16038 D. None of the above

50. Which one of them is a graphics solution for Word Processors?
**A. Clipart** B. WordArt
C. Drop Cap D. All of above

51. A word processor would most likely be used to do
**A. Type a biography**
B. Maintain an inventory
C. Do a computer search in the media center
D. Keep an account of money spent

52. What happens when you click on Insert >> Clip Art in Ms-word 2010?
A. It inserts a clipart picture into the document
B. It lets you choose clipart to insert into the document
**C. It opens the Clip Art task pane**
D. None of the above

53. _____ is not available in Insert Table Autofit behavior?
A. Fixed Column Width
**B. AutoFit to Column**
C. AutoFit to Window
D. None of above

54. What will happen when you will double click on the right border of the column of a table?
**A. It will AutoFit the width of the column**
B. It will AutoFit the width of the whole table according to the window
C. It will open tables borders and shedding dialog box
D. All of the above

55. From which menu you can insert Header and Footer?
A. Page Layout B. View Menu
C. Tools Menu **D. Insert Menu**

# MICROSOFT EXCEL

**Choose the Correct Answers.**

1. In Microsoft Excel, which of the following methods cannot be used to enter data in a cell.
   A. Pressing an arrow key
   B. Pressing the Tab key
   C. Pressing the Esc key
   D. Clicking on the formula bar

2. Which of the following will not cut information?
   A. Pressing Ctrl + C
   B. Selecting Edit>Cut from the menu
   C. Clicking the Cut button on the standard
   D. Pressing Ctrl+X

3. Which of the following is not a way to complete a cell entry?
   A. Pressing enter
   B. Pressing any arrow key on the keyboard
   C. Clicking the Enter button on the Formula bar
   D. Pressing spacebar

4. You can activate a cell by
   A. Pressing the Tab key
   B. Clicking the cell
   C. Pressing an arrow key
   D. All of the above

5. Text formulas:
   A. Replace cell references
   B. Return ASCII values of characters
   C. Concatenate and manipulate text
   D. Show formula error value

6. How do you insert a row?
   A. Right-click the row heading where you want to insert the new row and select Insert from the shortcut menu
   B. Select the row heading where you want to insert the new row and select Edit >Row from the menu
   C. Select the row heading where you want to insert the new row and click the Insert Row button on the standard toolbar
   D. All of the above

7. Which of the following is not a basic step in creating a worksheet?
   A. Save workbook
   B. Modify the worksheet
   C. Enter text and data
   D. Copy the worksheet

8. How do you select an entire column?
   A. Select Edit > Select > Column from the menu
   B. Click the column heading letter
   C. Hold down the shift key as you click anywhere in the column.
   D. Hold down the Ctrl key as you click anywhere in the column

9. How can you print three copies of a workbook?
   A. Select File>Properties to form the menu and type 3 in the Copies to print text box.
   B. Select File >Print from the menu and type 3 in the Number of copies text box.
   C. Click the Print button on the standard toolbar to print the document then take it to Kinko's and have 2 more copies made
   D. Press Ctrl+P+3

10. To create a formula, you first:
    A. Select the cell you want to place the formula into
    B. Type the equals sign (=) to tell Excel that you're about to enter a formula
    C. Enter the formula using any input values and the appropriate mathematical operators that make up your formula
    D. Choose the new command from the file menu

11. To center worksheet titles across a range of cells, you must
    A. Select the cells containing the title text plus the range over which the title text is to be centered
    B. Widen the columns
    C. Select the cells containing the title text plus the range over which the title text is to be enfettered
    D. Format the cells with the comma style

12. How do you delete a column?
    A. Select the column heading you want to delete and select the Delete Row button on the standard toolbar
    B. Select the column heading you want to delete and select Insert Delete from the menu
    C. Select the row heading you want to delete and select Edit>Delete from the menu
    D. Right-click the column heading you want to delete and select delete from the shortcut menu

13. How can you find specific information in a list?
    A. Select Tools > Finder from the menu

B. Click the Find button on the standard toolbar
C. Select Insert > Find from the menu
D. Select Data > Form from the menu to open the Data Form dialog box and click the Criteria button

14. When integrating word and excel, the word is usually the
A. Server B. Destination
C. Client D. Both b and c

15. When a label is too long to fit within a worksheet cell, you typically must
A. Shorten the label
B. Increase the column width
C. Decrease the column width
D. Adjust the row height

16. The name box
A. Shows the location of the previously active cell
B. Appears to the left of the formula bar
C. Appears below the status bar
D. Appears below the menu bar

17. Comments put in cells are called
A. Smart tip B. Cell tip
C. Web tip D. Soft tip

18. Which is used to perform what-if analysis?
A. Solver B. Goal seek
C. Scenario Manager
D. All of the above

19. You can use the horizontal and vertical scroll bars to
A. Split a worksheet into two panes
B. View different rows and columns edit the contents of a cell
C. Edit the contents of a cell
D. view different worksheets

20. Multiple calculations can be made in a single formula using
A. standard formulas
B. array formula
C. complex formulas
D. smart formula

21. Hyperlinks can be
A. Text B. Drawing objects
C. Pictures D. All of the above

22. To activate the previous cell in a pre-selected range, press
A. The Alt key B. The Tab key
C. The Enter key
D. None of the above

23. Which button do you click to add up a series of numbers?
A. The auto sum button
B. The Formula button
C. The quick total button
D. The total button

24. When the formula bar is active, you can see
A. The edit formula button
B. The cancel button
C. The enter button
D. All of the above

25. To copy formatting from one area in a worksheet and apply it to another area you would use:
A. The Edit>Copy Format and Edit>Paste Format commands form the menu.
B. The Copy and Apply Formatting dialog box, located under the Format>Copy and Apply menu.
C. There is no way to copy and apply formatting in Excel – You have to do it manually
D. The Format Painter button on the standard toolbar

26. In a worksheet you can select
A. The entire worksheet
B. Rows
C. Columns D. All of these

27. When you link data maintained in an excel workbook to a word document
A. The word document cannot be edit
B. The word document contains a reference to the source application
C. The word document must contain a hyperlink
D. The word document contains a copy of the actual data

28. Which area in an excel window allows entering values and formulas
A. Title bar B. Menu bar
C. Formula bar D. Standard toolbar

29. To hold row and column titles in place so that they do not scroll when you scroll a worksheet click the
A. Unfreeze panes command on the window menu
B. Freeze panes command on the window menu
C. Hold titles command on the edit menu
D. Split command on the window menu

30. To edit in an embedded excel worksheet object in a word document
A. Use the excel menu bar and toolbars inside the word application
B. Edit the hyperlink
C. Edit the data in an excel source application
D. Use the word menu bar and toolbars

31. To create a formula, you can use:
A. Values but not cell references
B. Cell references but not values

C. Values or cell references although not both at the same time
D. Value and cell references

32. Status indicators are located on the
A. Vertical scroll bar
B. Horizontal scroll bar
C. Formula bar
D. Standard toolbar

33. Which of the following is the oldest spreadsheet package?
A. VisiCalc B. Lotus 1-2-3
C. Excel D. Star Calc

34. Rounding errors can occur
A. When you use multiplication, division, or exponentiation in a formula
B. When you use addition and subtraction in a formula
C. Because excel uses hidden decimal places in computation
D. When you show the results of formulas with different decimal places that the calculated results

35. You can copy data or formulas
A. With the copy, paste, and cut commands on the edit menu
B. With commands on ta shortcut menu
C. With buttons on the standard toolbars
D. All of the above

36. You cannot link excel worksheet data to a word document
A. With the right drag method
B. With a hyperlink
C. With the copy and paste special commands
D. With the copy and paste buttons on the standard toolbar.

37. Which of the following is a popular DOS-based spreadsheet package?
A. Word B. Smart cell
C. Excel D. Lotus 1-2-3

38. An excel workbook is a collection of
A. Workbooks B. Worksheets
C. Charts
D. Worksheets and charts

39. Excel files have a default extension of
A. Xls B. Xlw
C. Wk1 D. 123

40. You can use the format painter multiple times before you turn it off by
A. You can use the format painter button only one time when you click it
B. Double-clicking the format painter button
C. Pressing the Ctrl key and clicking the format painter button
D. Pressing the Alt key and clicking the format painter button

41. You can use the formula palette to
A. Format cells containing numbers
B. Create and edit formulas containing functions
C. Enter assumptions data
D. Copy a range of cells

42. You can convert existing excel worksheet data charts to an HTML document by using
A. FTP wizard
B. Internet assistant wizard
C. Intranet wizard
D. Import wizard

43. A circular reference is
A. Geometric modeling tool
B. A cell that points to a drawing object
C. A formula that either directly or indirectly depends on itself
D. Always erroneous

44. Which of the following is Not one of Excel's what-if function?
A. Goal seek B. Solver
C. Scenario manager
D. Auto Outline

45. When you insert an excel file into a word document. The data are
A. Hyperlinked placed in a word table
B. Linked
C. Embedded
D. Use the word menu bar and toolbars

46. Which of the following is not information you can specify using the solver?
A. Input cells B. Constraints
C. Target cell D. Changing cells

47. Each excel file is called a workbook because
A. It can contain text and data
B. It can be modified
C. It can contain many sheets including worksheets and chart sheets
D. You have to work hard to create it

48. Excel probably considers the cell entry on January 1, 2000, to be a
A. Label B. Value
C. Formula D. Text string

49. You can enter which types of data into worksheet cells?
A. Labels, values, and formulas
B. Labe3ls and values but not formulas
C. Values and formulas but not labels
D. Formulas only

50. All worksheet formula
A. Manipulate values
B. Manipulate labels
C. Return a formula result
D. Use the addition operator

51. Which of the following is a correct order of precedence in formula calculation?
A. Multiplication and division exponentiation positive and negative values
B. Multiplication and division, positive and negative values, addition and subtraction
C. Addition and subtraction, positive and negative values, exponentiation
D. All of the above

52. The Paste Special command lets you copy and paste:
A. Multiply the selection by a copied value
B. Cell comments
C. Formatting options
D. The resulting values of a formula instead of the actual formula

53. The numbers in our worksheet look like this: You want them to look like this: $1,000.How can you accomplish this?
A. None of these
B. Select Format > Money from the menu
C. Click the Currency Style button on the formatting toolbar
D. You have to retype everything and manually add the dollar signs, commas, and decimals.

54. Which of the following is not a valid data type in excel?
A. Number B. Character
C. Label D. Date/time

55. Excel worksheet cells work very similarly to what common element of the windows graphical user interface
A. Option buttons
B. List boxes
C. Text boxes D. Combo boxes

56. Which of the following options is not located in the Page Setup dialog box?
A. Page Break Preview.
B. Page Orientation
C. Margins
D. Headers and Footers

57. You want to track the progress of the stock market daily. Which type of chart should you use?
A. Pie chart B. Row chart
C. Line chart D. Column chart

58. Without using the mouse or the arrow keys, what is the fastest way of getting to cell A1 in a spreadsheet?
A. Press Ctrl +Home B. Press Home
C. Press Shift + Home D. Press Alt + Home

59. Which of the following methods cannot be used to edit the contents of a cell?
A. Press the Alt key
B. Clicking the formula bar
C. Pressing the F2 key
D. Double-clicking the cell

60. If you begin typing an entry into a cell and then realize that you don't want your entry placed into a cell, you:
A. Press the Erase key
B. Press Esc
C. Press the Enter button
D. Press the Edit Formula button

61. To view a cell comment
A. click the edit comment command on the insert menu
B. click the display comment command on the window menu
C. position the mouse pointer over the cell
D. click the comment command on the view menu

62. When you want to insert a blank imbedded excel object in a word document you can
A. Click the object command on the insert menu
B. Click the office links button on the standard toolbar
C. Click the create worksheet button on the formatting toolbar
D. Click the import excel command on the File menu

63. To save a workbook, you:
A. Click the save button on the standard toolbar from the menu
B. Press Ctrl+F5
C. Click Save on the Windows Start button
D. Select Edit>Save

64. You can edit a cell by
A. Clicking the formula button
B. Double-clicking the cell to edit it in-place
C. Selecting Edit>Edit Cell from the menu
D. None of the above

65. You can select a single range of cells by
A. Clicking the upper-left cell in a group of cells and then pressing the Shift key while clicking the lower right cell in a group of cells
B. Pressing the Ctrl key while dragging over the desired cells
C. Pressing the Shift key and an arrow key
D. Dragging over the desired cells

66. Which elements of the worksheet can be protected from accidental modification?
A. Contents B. Objects
C. Scenarios D. All of above

67. You can use the drag and drop method to

A. Copy cell contents
B. Move cell contents
C. Add cell contents D. A and B

68. It is acceptable to let long text flow into adjacent cells on a worksheet when
A. Data will be entered in the adjacent cells
B. No data will be entered in the adjacent cells
C. There is no suitable abbreviation of the text
D. There is not time to format the next

69. How can you delete a record?
A. Delete the column from the worksheet
B. Select Data > Form from the menu to open the Data Form dialog box, find the record, and click the Delete button
C. Select Data > Delete Record from the menu
D. Click the Delete button on the Standard toolbar

70. Right-clicking something in Excel:
A. Deletes the object
B. Nothing the right mouse button is there for left-handed people
C. Opens a shortcut menu listing everything you can do to the object
D. Selects the object

71. Documentation should include
A. Destination and users of the output data
B. Source of input data
C. Information on the purpose of the workbook
D. All of the above

72. Files created with Lotus 1-2-3 have an extension
A. DOC B. XLS
C. 123 D. WK1

73. To delete embedded objects, first
A. Double click the object
B. Select the object by clicking it
C. Press the Shift + Delete keys
D. Select it and then press the delete key

74. Comments can be added to cells using
A. Edit > Comments
B. Insert > Comments
C. File > Comments
D. View > Comments

75. Which of the following is not a worksheet design criterion?
A. Efficiency B. Auditability
C. Description D. Clarity

76. To copy cell contents using drag and drop press the
A. End key B. Shift key
C. Ctrl key D. Esc key

77. Which of the following is the latest version of Excel?
A. Excel 2000 B. Excel 2002
C. Excel ME D. Excel XP

78. When you copy a formula
A. Excel erases the original copy of the formula
B. Excel edits cell references in the newly copied formula
C. Excel adjusts absolute cell references
D. Excel doesn't adjust relative cell references

79. The auto-fill feature
A. extends a sequential series of data
B. automatically adds a range of cell values
C. applies a border around the selected cells
D. none of the above

80. Which menu option can be sued to split windows into two?
A. Format > window B. View > window > split
C. Window > split D. View > split

81. Excel uniquely identifies cells within a worksheet with a cell name
A. Cell names
B. Column numbers and row letters
C. Column letters and row numbers
D. Cell locator coordinates

82. What symbol is used before a number to make it a label?
A. " (quote) B. = (equal)
C. _ (underscore) D. ' (apostrophe)

83. The auto calculate feature
A. Can only add values in a range of cells
B. Provides a quick way to view the result of an arithmetic operation on a range of cells
C. Automatically creates formulas and adds them to a worksheet
D. A and c

84. Which of the following formulas is not entered correctly?
A. =10+50 B. =B7*B1
C. =B7+14 D. 10+50

85. Which of the following formulas will Excel Not be able to calculate?
A. =SUM(Sales)-A3
B. =SUM(A1:A5)*.5
C. =SUM(A1:A5)/(10-10)
D. =SUM(A1:A5)-10

86. A typical worksheet has .... Number of columns
A. 128 B. 256
C. 512 D. 1024

87. How many characters can be typed in a single cell in Excel?
A. 256 B. 1024
C. 32000 D. 65535

88. A worksheet can have a maximum of .... Number of rows
A. 256 B. 1024
C. 32000 D. 65535

89. Which of the following is not an example of a value?
A. 350 B. May 10, 2001
C. 0.57
D. Serial Number 50771

90. The chart wizard term data series refers to
A. A chart legend
B. A collection of chart data markers
C. A set of values you plot in a chart
D. A data label

91. The Chart wizard term data categories refers to;
A. A chart plot area
B. A horizontal axis
C. The organization of individual values with a chart's data series
D. The data range that supply chart data

92. A worksheet range is a
A. A command used for data modeling
B. A range of values such as from 23 to 234
C. A group of cells
D. A group of worksheets

93. Getting data from a cell located in a different sheet is called
A. Accessing B. Referencing
C. Updating D. Functioning

94. Tab scrolling button
A. Allow you to view a different worksheet
B. Allow you to view additional worksheet rows down
C. Allow you to view additional worksheet columns to the right
D. Allow you to view additional sheets tabs

95. A numeric value can be treated as a label value if it precedes with
A. Apostrophe (&lsquo
B. Exclamation (!)
C. Hash (#)
D. Ampersand (&

96. Concatenation of text can be done using
A. Apostrophe (&lsquo
B. Exclamation (!)
C. Hash (#)
D. Ampersand (&

97. Data can be arranged in a worksheet in an easy to understand manner using
A. auto-formatting B. applying styles
C. changing fonts D. all of the above

98. You can use drag-and-drop to embed excel worksheet data in a word document
A. By dragging a range of excel data to the word button on the taskbar while pressing the Ctrl key
B. By dragging a range of excel data to the word button on the taskbar while pressing the Shift key
C. By dragging a range of excel data to the word button on the taskbar while pressing the Alt key
D. None of the above

**Answers:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 – C | 2 – A | 3 – D | 4 – D | 5 – C | 6 – A | 7 – D | 8 – B | 9 – B | 10 – A |
| 11 – A | 12 – D | 13 – D | 14 – D | 15 – B | 16 – B | 17 – B | 18 – D | 19 – B | 20 – B |
| 21 – D | 22 – D | 23 – A | 24 – D | 25 – D | 26 – B | 27 – B | 28 – C | 29 – B | 30 – A |
| 31 – D | 32 – C | 33 – A | 34 – A | 35 – D | 36 – D | 37 – D | 38 – D | 39 – A | 40 – B |
| 41 – B | 42 – B | 43 – C | 44 – D | 45 – B | 46 – A | 47 – C | 48 – B | 49 – A | 50 – C |
| 51 – D | 52 – D | 53 – C | 54 – B | 55 – C | 56 – A | 57 – C | 58 – A | 59 – A | 60 – B |
| 61 – C | 62 – A | 63 – A | 64 – B | 65 – D | 66 – D | 67 – D | 68 – B | 69 – B | 70 – C |
| 71 – D | 72 – C | 73 – D | 74 – B | 75 – C | 76 – D | 77 – D | 78 – B | 79 – D | 80 – C |
| 81 – C | 82 – B | 83 – B | 84 – D | 85 – A | 86 – B | 87 – D | 88 – D | 89 – D | 90 – B |
| 91 – B | 92 – C | 93 – B | 94 – D | 95 – A | 96 – D | 97 – D | 98 – A | | |

# MICROSOFT POWERPOINT

**Choose the Correct Answers.**

1. Which file format can be added to a PowerPoint show?
   A. jpg b. gif
   c. wav d. All of the above

2. In Microsoft PowerPoint two kind of sound effects files that can be added to the presentation are
   A. wav files and .mid files
   b. wav files and .gif files
   c. wav files and .jpg files
   d. jpg files and .gif files

3. Material consisting of text and numbers is best presented as
   A. table slide b. bullet slide
   C. title slide d. ll of the above

4. What is a motion path?
   a. type of animation entrance effect
   b. method of advancing slides
   C. method of moving items on a slide
   d. ll of the above

5. What is a slide-title master pair?
   a. The title area and text area of a specific slide
   b. a slide master and title master merged into a single slide
   c. A slide master and title master for a specific design template
   d. All of the above

6. Which of the following should you use if you want all the slides in the presentation to have the same "look"?
   a. the slide layout option
   b. add a slide option
   c. outline view
   d. a presentation design template

7. In the context of animations, what is a trigger?
   a. An action button that advances to the next slide
   b. An item on the slide that performs an action when clicked
   c. The name of a motion path
   d. All of the above

8. If you have a PowerPoint show you created and want to send using email to another teacher you can add the show to your email message as a (an)
   a. Inclusion b. Attachment
   c. Reply d. Forward

9. To edit a chart, you can
   a. Triple-click the chart object
   b. Click and drag the chart object
   c. Double click the chart object
   d. Click the chart object

10. To exit the PowerPoint
    a. click the application minimize button
    b. click the document close button
    c. double click the applications control menu icon
    d. double click the document control menu icon

11. To preview a motion path effect using the custom animation task pane, you should
    A. click the play button
    B. click the show effect button
    C. double click the motion path
    D. all of the above

12. You can create a new presentation by completing all of the following except
    a. Clicking the new button on the standard toolbar
    b. Clicking file, new
    c. Clicking file open
    d. Pressing Ctrl + N

13. You can embed an MS-Organization Chart in a slide by
    a. Clicking the object command on the edit menu
    b. Clicking the object command on the edit menu
    c. Clicking the insert new slide button in the standard toolbar, then double click the organization chart button on the formatting toolbar
    d. Clicking the MS-Organization Chart button on the standard toolbar

14. To select one hyperlink after another during a slide presentation, what do you press?
    a. Tab b. Ctrl + K
    c. Ctrl + h d. All of above

15. Special effects used to introduce slides in a presentation are called
    a. effects
    b. custom animations
    c. transitions
    d. present animations

16. You can edit an embedded organization chart object by
    a. Clicking edit object
    b. Double-clicking the organization chart object
    c. Right-clicking the chart object, then clicking edit MS-Organization Chart object
    d. b and c both

17. What is the term used when you press and hold the left mouse key and move the mouse around the slide?
    a. Highlighting b. Dragging
    c. Selecting d. Moving

18. Which of the following toolbars provide different options in various master views?
    a. Common tasks toolbar
    b. Drawing toolbar
    c. Formatting toolbar
    d. Standard toolbar

19. How can you create a uniform appearance by adding a background image to all slides?
    a. Create a template
    b. Edit the slide master
    c. Use the autocorrect wizard
    d. All of the above

20. How do you create speaker note pages that show the slides, related notes, and your company logo on each page?
    a. Edit the notes master and add your company logy
    b. Edit the slide master and insert your company logo and notes pane
    c. Edit the handout master to include your company logo and one slide per page with additional note space
    d. All of the above

21. Which option on the custom animation task pane allows you to apply a preset or custom motion path?
    a. Add effect b. Emphasis
    c. Animate now d. All of the above

22. What is the term used when a clip art image changes the direction of faces?
    a. Group b. Flip
    c. Rotate d. All of the above

23. The slide that is used to introduce a topic and set the tone for the presentation is called the
    a. table slide b. graph slide
    c. bullet slide d. title slide

24. Which of the following features should you use when typing in the notes text box?
    a. Slide show b. Insert
    c. Slide maser d. Zoom

25. Which option allows you to select line, curve, freeform or scribble tools?
    a. Create effect
    b. Insert motion path
    c. Draw custom path
    d. All of the above

26. Which of the following should be used when you want to add a slide to an existing presentation?
    a. File, add a new slide
    b. Insert, New slide
    c. File Open d. File, New

27. The size of the organization chart object
    a. Is determined by the presentation design and can not be changed
    b. Is determined by the presentation design but can be changed in PowerPoint
    c. Is dependent on the amount of text within the organization chart
    d. b and c

28. Which of the following is the default page setup orientation of slide in PowerPoint
    a. Vertical b. Landscape
    c. Portrait d. None of above

29. Want a PowerPoint photo album slide show to play continuously?
    a. Use random slide transitions
    b. Launch an online broadcast
    c. Loop continuously
    d. All of the above

30. What is defined by the handout master?
    a. Slide formatting
    b. Layout of audience handout notes
    c. Handout content formatting for Microsoft word export
    d. All of the above

31. Which of the following tool enables you to add text to a slide without using the standard placeholders?
    a. Text tool box b. Line tool
    c. Drawing tool d. Auto shapes tool

32. In notes master view, how do you modify the font size of the text for all hte4 notes of a presentation?
    a. Modify the slide design
    b. Modify the notes master layout
    c. Modify the text within the body placeholder
    d. All of the above

33. Want your logo in the same position on every slide, automatically? Insert it on the
a. Handout master
b. Notes master
c. Slide master
d. All of the above

34. Which of the following views is the best view to use when setting transition effects for all slides in a presentation?
a. Slide sorter view
b. Notes pages view
c. Slide view d. Outline view

35. Objects on the slide that hold text are called
a. Placeholders b. Object holders
c. Auto layouts d. Text holders

36. Which of the following provides a means of printing out feature notes with a miniature slide on a printed page?
a. Slide with animation
b. Outline view
c. Notes page
d. Audience handout

37. Which command brings you to the first slide in your presentation?
a. Next slide button
b. Page up
c. Ctrl + Home
d. Ctrl + End

38. In normal view, how can you quickly change to a handout master view?
a. Click the outline tab and select handout master view
b. Press the shift key and click the handout master view button
c. On the view menu, click slide sorter and click handouts.
d. All of the above

39. How can you quickly reinstate a deleted footer placeholder in a master view?
a. Create a new slide master
b. Re-apply the footer placeholder
c. Re-apply the slide layout
d. All of the above

40. Which of the following can you use to add times to the slides in a presentation?
a. Slide show menu
b Rehearse timings button
c. Slide transition button
d. All of the above

41. To select all of the boxes of an organization chart
a. Clicking and edit and select all
b. Right-click the chart background and then click select all
c. Press and hold the SHIFT key and click each box
d. All of the above

42. You can show the shortcut menu during the slide show by
a. Clicking the shortcut button on the formatting toolbar
b. Right-clicking the current slide
c. Clicking an icon on the current slide
d. a and b

43. Auto clipart is a feature that
a. Automatically places clipart in your presentation
b. Scans your presentation for incorrect spelling in your words on each slide
c. Scans your presentation for incorrect spelling in Word Arts objects
d. All of the above

44. To edit the text within the boxes of an organization chart, you
a. select the box and text, then make changes
b. select the box, then make the changes
c. highlight the text, they make the changes
d. a and b both

45. Which of the following allows you to select more than one slide in a presentation?
a. Alt + Click each slide
b. Shift + drag each slide
c. Shift + Click each slide
d. Ctrl + Click each slide

46. The view that displays the slides on a presentation as miniature representations of the slides is called
a. slide show
b. slide sorter view
c. notes page view
d. outline view

47. The PowerPoint view that displays only text (title and bullets) is
a. Slide show
b. Slide sorter view
c. Notes page view
d. Outline view

48. In Microsoft PowerPoint the entry effect as one slide replaces another in a show is called a (an)
a. animation b. slide transition
c. custom animation
d. preset animation

49. Which of the following presentation elements can you modify using the slide master?
a. Slide comments
b. Slide transitions
c. Speaker note font and color
d. All of above

50. Which of the following provides a printed copy of your presentation?
a. Outline
b. Speaker notes
c. Audience handouts
d. All of the above

51. Slide show options available to the presenter include all of the following except
a. Transitions command
b. Speaker notes command
c. Meeting reminder command
d. Navigation commands

52. Presentation designs regulate the formatting and layout for the slide and are commonly called
a. Design plates b. Templates
c. Placeholders d. Blueprints

53. Which of the following bypasses the print dialog box when printing individual slides or an entire presentation?
a. File, print, preview
b. The print button
c. File, print
d. Ctrl + p

54. To add a header or footer to your handout, you can use
a. The title master b. The slide master
c. The handout master d. All of the above

55. Which of the following will not advance the slides in a slide show view?
a. Esc key b. The spacebar
c. The Enter key
d. The mouse button

56. What are lines, curve, freeform, and scribble?
a. Emphasis effects that can be applied to animations
b. Types of custom motion paths
c. Predefined entrance and exit effects
d. All of the above

57. Comments on a presentation can record who wrote them and when they were added. What's the automatic way in PowerPoint 2002?
a. Use online collaboration
b. Use comments
c. Use the notes page
d. All of the above

58. When using PowerPoint, to play a PowerPoint show for previewing the show, select
a. View, slide sorter b. View, slide
c. View, slide show d. View outline

59. In Microsoft PowerPoint in order to see all the slides on one screen use
a. view, slide sorter
b. view, slide
c. view, master
d. view, slide show

60. What's the best place to find animated images for your PowerPoint 2002 presentation?
a. Microsoft online b. Word clipart
c. PowerPoint tools and ins
d. All of the above

61. What's the easy way to apply varied animations to test on slides
a. apply effects in the custom animation text pane
b. apply an animation scheme
c. customize bullets with animated clipart
d. all of above

62. Using a custom animation effect, how do you make text appear on a slide by letter
a. Apply the animation scheme fade in one by one.
b. Apply an entrance effect, and then set it to by letter in the effect option dialog box
c. Apply the fly in the entrance to the text, and then set its speed to very slow.
d. All of the above

63. To exit the PowerPoint application, you should
a. Click the application minimize button
b. Click the document close button
c. Double click the application control menu icon
d. Double click the document control menu icon

64. You can create a new presentation by completing all of the following except:
a. Clicking the new button on the standard toolbar
b. Clicking file, new
c. Clicking file open
d. Pressing Ctrl + N

65. You have customized a design template in one presentation and you want to use it in another presentation. What the best way to do this?
a. Use the browse feature in the slide design task pane to find the file that has your design template and apply it to the current file.

b. Copy and paste the slide with the design template you want to include in the new presentation; inserted slide will inherit the design
c. Save the presentation that has the design template with a new name and then use a new file to your presentation
d. All of the above.

66. Which of the following options in the printer dialog box would you select to print slides 5 and 12 in a presentation?
a. Slides
b. Custom shows
c. Current slide
d. All

67. Which of the following toolbars provides different options in various master views?
a. Common tasks toolbar
b. Drawing toolbar
c. Formatting toolbar
d. Standard toolbar

68. You can tell when an object is active because
a. The object is highlighted
b. Eight small sizing handles appear surrounding the text
c. A box frame appears surrounding the text
d. b and c

69. Which of the following is not an option when printing handouts?
a. Six slides per page
b. Five slides per page
c. Three slides per page
d. Two slides per page

70. What's the best way to design the layout for your slides?
a. Create layouts for slides, handouts, and notes using the Master Layout dialog box in slide master view
b. For each new slide, select a layout from the Slide Layout task pane
c. Apply templates from the Slide Design task pane
d. None of the above

71. Any and every command can be found on the
a. Drawing toolbar
b. Formatting toolbar
c. Standard toolbar
d. Menu bar

72. The slide that is used to introduce a topic and set the tone for the presentation is called the
a. Table slide
b. Graph slide
c. Bullet slide
d. Title slide

73. How do you print your slides in a handout that includes lines for notes?
a. In the print dialog box, select handout and set the number of slides per page to 3
b. In the print dialog box, select handout and set the number of slides per page, then select the include comment page option
c. In the print dialog box select note page instead of a handout
d. All of the above

74. Which of the following features should you use when typing in the notes text box?
a. Slide shows
b. Insert
c. Slide master
d. Zoom

75. Which of the following should e used when you want to add a slide to an existing presentation?
a. File, add a new slide
b. Insert, new slide
c. File, open
d. File, new

**Answers:**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 – d | 2 – a | 3 – a | 4 – c | 5 – c | 6 – d | 7 – b | 8 – b | 9 – c | 10 – c |
| 11 – a | 12 – c | 13 – b | 14 – a | 15 – c | 16 – d | 17 – b | 18 – a | 19 – b | 20 – a |
| 21 – a | 22 – c | 23 – d | 24 – d | 25 – c | 26 – b | 27 – d | 28 – b | 29 – a | 30 – b |
| 31 – a | 32 – c | 33 – c | 34 – a | 35 – a | 36 – d | 37 – c | 38 – b | 39 – b | 40 – b |
| 41 – d | 42 – b | 43 – d | 44 – a | 45 – c | 46 – b | 47 – d | 48 – b | 49 – b | 50 – c |
| 51 – a | 52 – b | 53 – b | 54 – c | 55 – a | 56 – b | 57 – b | 58 – c | 59 – a | 60 – a |
| 61 – b | 62 – b | 63 – c | 64 – c | 65 – a | 66 – a | 67 – a | 68 – a | 69 – b | 70 – b |
| 71 – d | 72 – d | 73 – a | 74 – d | 75 – b | | | | | |

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# Windows Operating System

## Multiple Choice Questions

1. An operating system provides a/an _____ to interact with user.
   A. Software.
   **B. Interface.**
   C. Command.
   D. Document.
   **Difficulty:** Easy.
   **Explanation:** An operating system provides a connection to interact with users. Without an operating system, a computer is useless.

2. Operating system has ____ types.
   A. Four.
   B. Three.
   **C. Two.**
   D. One
   **Difficulty:** Easy.
   **Explanation:** It is a fact.

3. Unix is an example of _____.
   A. GUI operating system.
   B. Computer virus.
   C. Hardware.
   **D. Command line operating system.**
   **Difficulty:** Medium.
   **Explanation:** Unix is an operating system that follows command-line interfacing. It interacts with a computer program when a user commands the program through a series of text commands.

4. The first successful series of windows was _____.
   **A. Windows 3.x series.**
   B. Windows 95.
   C. Windows 98.
   D. Windows 2000.
   **Difficulty:** Medium.
   **Explanation:** Microsoft Corporation released its first successful series of Windows named Windows 3.x series which was not an operating system but had an operating environment that provided a GUI.

5. Windows 98 was released in year _____.
   A. 1995.
   B. 1996.
   C. 1990.
   **D. 1998.**
   **Difficulty:** Easy.
   **Explanation:** It is a fact.

6. Which of the following windows is based on NT technology?
   A. Windows 98.
   **B. Windows 2000.**
   C. Windows 95.
   D. Windows 3.x series.
   **Difficulty:** Medium.
   **Explanation:** All the recent versions of Windows including Windows 2000 are based on NT technology.

7. In a mouse, _____ click is used to select graphical objects.
   A. Drag.
   **B. Left.**
   C. Right.
   D. None of these.
   **Difficulty:** Easy.
   **Explanation:** When we click the left button of the mouse, graphical objects like file icon or text is selected in a document.

8. Which of the following windows is a multitasking operating system?
   A. Windows 2000.
   B. Windows 95.
   C. Windows 98.
   D. Windows 3.x series.
   **E. All options are correct**
   **Difficulty:** Medium.
   **Explanation:** Windows 2000 can load multiple programs into the memory at a time.

9. Windows usually create how many types of partitions?
   A. Five.
   B. Four.
   C. Three.
   **D. Two.**
   **Difficulty:** Easy.
   **Explanation:** Windows usually create two basic partitions known as a primary and extended partition.

10. Files are recognized by their _____ in Microsoft windows.
    A. Size.
    B. Type.
    **C. Extension.**
    D. Path.
    **Difficulty:** Medium.
    **Explanation:** Files are always recognized by their extension in Microsoft Windows.

11. Disk management also indicates which of the following?
    **A. Which drive has a system partition.**
    B. Shows file extension.
    C. Location of files.
    D. None of these.

**Difficulty:** Medium.
**Explanation:** Along with finding the size of the drive and file system at a glance, disk management also indicates which of the drive contains the system partition.

12. With windows explorer, you can manage
A. Just local files.
B. Just folders and drives.
C. Just remote files and folders.
**D. All of these.**
**Difficulty:** Medium.
**Explanation:** The purpose of a windows explorer is to manage all the above.

14. Which of the following can also be shared on a network.
**A. Printer.**
B. Speaker.
C. Keyboard.
D. Monitor.
**Difficulty:** Easy.
**Explanation:** The printer is such a device that can be shared with others with the help of a network.

15. Keyboard events are of _____ types.
A. Four.
**B. Three.**
C. Two.
D. One.
**Difficulty:** Medium.
**Explanation:** Keyboard events are such actions that can be performed with the help of a keyboard and these events or actions are of three types, key up, key down and key press.

16. You can permanently delete or restore items from
A. My computer.
B. Desktop.
**C. Recycle Bin.**
D. Hard drive.
**Difficulty:** Easy.
**Explanation:** A recycle bin is used to permanently delete an item. Deleted items can also be restored from a recycle bin.

17. Which of the following document is created by windows on installation time.
**A. My Documents.**
B. MS Excel.
C. MS Word.
D. None of these.
**Difficulty:** Easy.
**Explanation:** At the time of installing windows, my documents are created as a default folder by windows for storing different kinds of documents.

18. When can the hard disk be divided into multiple partitions.
A. Any time.
**B. While installing windows.**
C. After installing windows.
D. Never.
**Difficulty:** Medium.
**Explanation:** Hard disk can only be divided into multiple partitions when the windows are being installed.

19. _____ is an on-screen work area.
A. My computer.
B. My Documents.
**C. Desktop.**
D. Internet explorer.
**Difficulty:** Easy.
**Explanation:** Desktop is an area which has windows, icons, menus, and a dialogue box appears. It is an on-screen area of work.

20. Which of the following is an example of a GUI?
A. Solaris.
B. Windows
C. Unix.
**D. Both A. and B.**
**Difficulty:** Medium.
**Explanation:** Solaris and windows are examples of a graphical user interface that establishes user communication with the computer.

# Word Processing

## Multiple Choice Questions

1. How many percent of the personal computers have a word processor installed?
   A. 60%
   B. 70%
   C. 80%
   **D. 90%**
   **Difficulty:** Easy.
   **Explanation:** A word processing software is the most frequently used software and 90% of the computers have this software installed in it.

2. All kinds of text-based documents are created with the help of _____.
   **A. Word Processor.**
   B. MS Excel.
   C. PowerPoint.
   D. All of these.
   **Difficulty:** Medium.
   **Explanation:** A word processor is a software with the help of which we can create all kinds of text-based documents.

3. Which of the following is a great advantage of word processing?
   A. You can cut-paste a document easily.
   B. You can copy-paste a document easily.
   **C. You can make changes without retyping the entire document.**
   D. All of these.
   **Difficulty:** Hard.
   **Explanation:** If you are using a word processor, the best advantage that you can get over a typewriter is that you can make any kind of changes in the whole document without ever retyping the whole document.

4. What is the purpose of Document Windows?
   A. Allows you to edit a document.
   **B. Allows you to edit two or more documents at the same time.**
   C. Allows you to edit documents at different times.
   D. None of these.
   **Difficulty:** Hard.
   **Explanation:** A word document is used for editing two or more documents simultaneously. The document appears in a separate window.

5. To understand the working of a word processor, you should be familiar with its _____.
   **A. Interface.**
   B. Editing.
   C. Formatting.
   D. All of these.
   **Difficulty:** Medium.
   **Explanation:** A word processor can only be used efficiently by a user if a user is familiar with its interface.

6. What is the purpose of the title bar?
   A. To show the date.
   B. To show messages at the bottom.
   **C. Displays the name of the active application.**
   D. Displays the positioning of text and tabs.
   **Difficulty:** Hard.
   **Explanation:** The purpose of a title bar is to display the name of the application that is currently active. The name is always displayed on the top of a window.

7. A blinking insertion point is also known as the cursor is displayed at the _____ corner of the screen.
   A. Top right.
   **B. Top left.**
   C. Extreme right.
   D. Extreme left.
   **Difficulty:** Medium.
   **Explanation:** In a word processor, a cursor is always placed at the top left corner of the screen.

8. There are _____typing modes.
   A. Four.
   B. Three.
   **C. Two.**
   D. None of these.
   **Difficulty:** Easy.
   **Explanation:** All word processors have two typing modes, insertion mode and overtype mode.

9. Which of the following keys is used while using the arrow buttons to select the text?
   A. Caps lock key.
   B. Num lock key.
   C. Alt key.
   **D. Shift key.**
   **Difficulty:** Medium.
   **Explanation:** A shift key when used with arrow buttons enables a user to select a text in a word processor.

10. Formatting of a text includes
    A. Erasing of a text.
    B. Changing the appearance of a text.
    C. Adding pictures and graphics in a text.
    **D. All of these.**
    **Difficulty:** Medium.
    **Explanation:** Formatting a document includes erasing, changing appearance, adding pictures, and graphics in a text.

11. What is the purpose of indents?

A. To add spaces between paragraphs.
**B. To determine the distance of each line of a paragraph to margins.**
C. To define boundaries of a text.
D. To align a text or a document.
**Difficulty:** Hard.
**Explanation:** In a word processor, the purpose of indents is to determine the distance of each line of a paragraph to the margins.

12. A tab stop is measured from
**A. Left to right.**
B. Right to left.
C. Up to down.
D. Down to up.
**Difficulty:** Hard.
**Explanation:** A tab stop is a position in a document that is always measured from left to right.

13. The easiest way to create a table on a word processor is
**A. To create from the menu bar.**
B. To draw yourself.
C. Both A. and (b).
D. None of these.
**Difficulty:** Easy.
**Explanation:** The easy way to create a table is to go to the menu bar and select the insert table option and mention the number of rows and columns.

14. A clipboard is a _____ space.
A. Permanent holding.
**B. Temporary holding.**
C. Editing.
D. None of these.
**Difficulty:** Easy.
**Explanation:** A clipboard is a temporary holding space that is used for storing text, graphics, and other data for a while.

15. Which of the following is thought of as painted pictures?
A. Vector images.
B. Printed images
**C. Bitmap Images.**
D. None of these.
**Difficulty:** Medium.
**Explanation:** Bitmap graphics or images are also considered as painted pictures in a word processor.

16. The purpose of the Auto shapes toolbar is to
A. Draw simple shapes.
B. Draw different geometrical shapes.
C. Draw arrows, stars, and banners.
**D. Both B and C**
**Difficulty:** Medium.
**Explanation:** Auto shape toolbar has a lot of different options that enable a user to draw different geometrical shapes and also other things like drawing arrows, stars, and banners.

17. Vector graphics are also known as
**A. Line drawings.**
B. Painted pictures.
C. Arrows.
D. None of these.
**Difficulty:** Easy.
**Explanation:** MS word contains two main tools for manipulating graphics. Bitmap graphics and vector graphics. Vector graphics are also known as line drawings.

18. Redo means
A. To erase a document.
**B. To reverse the previous undo.**
C. To insert a word.
D. None of these.
**Difficulty:** Easy.
**Explanation.** The purpose of redo in a word document is to reverse the undo (reverse the changes you have made to the document).

19. To switch to a different font style, the toolbar has _____ buttons.
A. Combine.
B. Only one.
**C. Separate.**
D. None of these.
**Difficulty:** Easy.
**Explanation:** Different font styles can be selected in a word processor and they can be selected from the formatting toolbar. The toolbar has separate buttons for these options.

20. The delete key erases the character to the _____ of the cursor.
A. Left
**B. Right.**
C. Both A and B
D. None of these.
**Difficulty:** Easy.
**Explanation:** The delete key is used to erase the cursor to the right.

# Spreadsheet

## Multiple Choice Questions

1. A spreadsheet is a grid of
   A. Only rows.
   B. Only columns.
   **C. Rows and columns.**
   D. None of these.
   **Difficulty:** Easy.
   **Explanation:** A spreadsheet holds a large amount of data arranged in rows and columns.

2. A collection of related worksheets is known as
   **A. Workbook.**
   B. Worksheet.
   C. Work pad.
   D. Notepad.
   **Difficulty:** Medium.
   **Explanation:** A workbook in a spreadsheet is a combination or collection of worksheets that are related to one another.

3. Where is the data entered in a worksheet?
   A. Rows.
   B. Columns.
   **C. Cells.**
   D. Both A and B
   **Difficulty:** Medium.
   **Explanation:** In a worksheet, a cell is a basic unit where data is entered.

4. What indicates an active cell?
   **A. A bold rectangular border.**
   B. A bold Square border.
   C. Both A and B
   D. None of these.
   **Difficulty:** Medium.
   **Explanation:** Using a mouse or an arrow key, a cell is made active and a bold rectangular border indicates it.

5. Labels are used to identify.
   A. Whole numbers.
   B. A value or a series of values.
   C. Decimals.
   D. Negative numbers.
   **Difficulty:** Medium.
   **Explanation:** Labels are used to identify value and value can be a whole number or decimal or even a negative number.

6. Calling cells just by their addresses is known as
   A. Cell reference.
   B. Labelling.
   **C. Relative referencing.**
   D. Absolute referencing.
   **Difficulty:** Easy.
   **Explanation:** if we are calling a cell only be their addresses for example "A1" then it is known as relative referencing.

7. If you place a $ sign within the cell addresses in the formula it is known as
   **A. Absolute referencing.**
   B. Relative referencing.
   C. Ranges.
   D. Labelling.
   **Difficulty:** Easy.
   **Explanation:** An absolute referencing is to add a dollar sign within the cell addresses so that when an addition formula in cell one is copied to cell 2, it will not change.

8. What is the distinguishing feature of a spreadsheet program?
   A. It does calculations.
   B. It creates execute functions.
   C. It creates mathematical formulas.
   **D. Both B and C**
   **Difficulty:** Medium.
   **Explanation:** The distinguishing feature of a spreadsheet program is to create mathematical formulas and execute all the functions.

9. Functions are built-in formulas used to
   **A. Perform complex operations.**
   B. Do addition.
   C. Do subtraction.
   D. None of these.
   **Difficulty:** Easy.
   **Explanation:** Functions are built-in formulas that are used to perform complex operations.

10. The default number format assigned to a cell is known as _____ format.
    A. Custom format.
    **B. General format.**
    C. Currency format.
    D. None of these.
    **Difficulty:** Easy.
    **Explanation:** In a general format, the default number format is assigned to a cell.

11. Every part of a number format is separated from the other with the help of
    A. Full stop.
    B. Comma.
    C. Hyphen.
    **D. Semicolon.**
    **Difficulty:** Medium.
    **Explanation:** A number format has four parts and every part is separated from one another with the help of a semicolon.

12. Alignment of the cell contents can be changed with the help of
(a) Dialog box.
**(b) Alignment tab.**
(c) Wrap text.
(d) Merge cells.
**Difficulty:** Easy.
**Explanation:** Every cell content can be aligned with the help of the alignment tab.

13. Charts allow you to present data into the worksheet in a _____ format.
**(a) Visual.**
(b) Oriented.
(c) Organized.
(d) All of these.
**Difficulty:** Medium.
**Explanation:** The purpose of charts is to present data into the worksheet in a visual format using different types of graphs.

14. We can add headers and footers to the page by clicking _____.
(a) Header tab.
(b) Footer tab.
**(c) Drop-down menu.**
(d) None of these.
**Difficulty:** Medium.
**Explanation:** We can add headers and footers to the page by clicking the drop-down menus under the Header/Footer tab.

15. After you are done setting the page format, select the _____ option to print the worksheet.
**(a) File/Print.**
(b) Print.
(c) File.
(d) All of these.
**Difficulty:** Medium.
**Explanation:** The worksheet is printed by selecting the file/print option from the menu.

# Fundamentals of the Internet

## Multiple Choice Questions

1. Advanced Research Project Agency established a small computer network in which year.
(a) 1966.
(b) 1967.
(c) 1968.
**(d) 1969.**
**Difficulty:** Easy.
**Explanation:** In 1969, ARPA established a small network of computers among different universities and organizations that could lead to a larger computer network afterward.

2. NSF established a high-speed network known as _____.
(a) ARPANET.
**(b) NSFnet.**
(c) NSF.
(d) ARPA.
**Difficulty:** Easy.
**Explanation:** The National science foundation established a high-speed network known as NSFnet for its supercomputers.

3. A T1 line can approximately handle _____ bits per second.
(a) 2.5 megabits.
(b) 2 megabits.
**(c) 1.5 megabits.**
(d) 1 megabits.
**Difficulty:** Easy.
**Explanation:** A T1 line can handle almost 1.5 megabits per second.

4. A normal phone line using a modem can typically handle _____ bits per second.
**(a) 30,000 to 50,000.**
(b) 40,000 to 60,000.
(c) 50,000 to 70,000.
(d) 60,000 to 80,000.
**Difficulty:** Easy.
**Explanation:** It is a fact.

5. Every computer has a unique _____ and can be contacted on it.
(a) Internet protocol.
**(b) Address.**
(c) Domain names.
(d) None of these.
**Difficulty:** Medium.
**Explanation:** On the internet, every computer has a unique address and can be contacted at this address.

6. IP stands for internet protocol and these addresses are _____ numbers.
(a) 64-bit.
(b) 16-bit.
**(c) 32-bit.**
(d) None of these.
**Difficulty:** Easy.
**Explanation:** IP addresses are 32-bit numbers.

7. The octets are _____ numbers in an IP address.
(a) 12.
(b) 10.
(c) 8.

(d) 4.
**Difficulty:** Easy.
**Explanation:** The octets are the four numbers in an IP address.

8. The octets have values between __ and ___.
(a) 0, 355.
(b) 0, 360.
**(c) 0, 255.**
(d) 0, 260.
**Difficulty:** Medium.
**Explanation:** The IP addresses that are also known as octets can have values between 0 and 255.

9. Human-readable names are also known as
(a) Web pages.
**(b) Domain names.**
(c) Hyperlinks.
(d) Web browser.
**Difficulty:** Medium.
**Explanation:** Sometimes IP addresses need to be changed so for this reason all servers also have human-readable names known as domain names.

10. The two parts in the name www.hotmail.com are
**(a) Hostname, domain.**
(b) Domain, address.
(c) IP, DNS.
(d) DNS, address.
**Difficulty:** Medium.
**Explanation:** Hostname and domain are the two parts in www.hotmail.com.

11. URL stands for.
(a) Universal Region Locator.
**(b) Uniform Resource Locator.**
(c) Universal Region Locator.
(d) Uniform Region Locator.
**Difficulty:** Easy.
**Explanation:** It is a fact.

12. HTML stands for.
(a) Hypertext marking language.
(b) Hypertext marking line.
**(c) Hypertext markup language.**
(d) Hypertext marking up the line.
**Difficulty:** Easy.
**Explanation:** It is a fact.

13. Google.com, ask.com, and altavista.com is an example of which of the following.
(a) Web pages.
(b) Web browser.
(c) World Wide Web.
**(d) Search Engine.**
**Difficulty:** Medium.
**Explanation:** a search engine is a website that uses powerful data searching techniques to locate web sites that have different types of contents in it.

14. How much time does an email take to go across a country or around the world?
(a) Hours.
(b) Minutes.
**(c) Seconds.**
(d) None of these.
**Difficulty:** Easy.
**Explanation:** E-mail is a system for delivering messages over the internet and takes only a few seconds to deliver a message.

15. News servers use which of the following protocols to communicate?
(a) Internet Protocol.
**(b) Network News Transfer Protocol.**
(c) Both A and B
(d) None of these.
**Difficulty:** Medium.
**Explanation:** A news server is a host computer that exchanges articles with other servers on the internet with the help of NNTP as a means to communicate.

# WINDOWS KEYBOARD SHORTCUTS

## The General Shortcuts

- CTRL+C (Copy)
- CTRL+X (Cut)
- CTRL+V (Paste)
- CTRL+Z (Undo)
- Delete (Delete)
- Shift+Delete (Delete the selected item permanently without placing the item in the Recycle Bin)
- CTRL while dragging an item (Copy the selected item)
- CTRL+Shift while dragging an item (Create a shortcut to the selected item)
- F2 key (Rename the selected item)
- CTRL+RIGHT ARROW (Move the insertion point to the beginning of the next word)
- CTRL+LEFT ARROW (Move the insertion point to the beginning of the previous word)
- CTRL+DOWN ARROW (Move the insertion point to the beginning of the next paragraph)
- CTRL+UP ARROW (Move the insertion point to the beginning of the previous paragraph)
- CTRL+Shift with any of the arrow keys (Highlight a block of text)
- Shift with any of the arrow keys (Select more than one item in a window or on the desktop, or select text in a document)
- CTRL+A (Select all)
- F3 key (Search for a file or a folder)

- Alt+Enter (View the properties for the selected item)
- Alt+F4 (Close the active item, or quit the active program)
- Alt+Enter (Display the properties of the selected object)
- Alt+Spacebar (Open the shortcut menu for the active window)
- CTRL+F4 (Close the active document in programs that enable you to have multiple documents open simultaneously)
- Alt+Tab (Switch between the open items)
- Alt+ESC (Cycle through items in the order that they had been opened)
- F6 key (Cycle through the screen elements in a window or on the desktop)
- F4 key (Display the Address bar list in My Computer or Windows Explorer)
- Shift+F10 (Display the shortcut menu for the selected item)
- Alt+Spacebar (Display the System menu for the active window)
- CTRL+ESC (Display the Start menu)
- Alt+Underlined letter in a menu name (Display the corresponding menu)
- Underlined letter in a command name on an open menu (Perform the corresponding command)
- F10 key (Activate the menu bar in the active program)
- RIGHT ARROW (Open the next menu to the right, or open a submenu)
- LEFT ARROW (Open the next menu to the left, or close a submenu)
- F5 key (Update the active window)
- Backspace (View the folder one level up in My Computer or Windows Explorer)
- ESC (Cancel the current task)
- Shift when you insert a CD-ROM into the CD-ROM drive (Prevent the CD-ROM from automatically playing)

## Dialog Box Keyboard Shortcuts

- CTRL+Tab (Move forward through the tabs)
- CTRL+Shift+Tab (Move backward through the tabs)
- Tab (Move forward through the options)
- Shift+Tab (Move backward through the options)
- Alt+Underlined letter (Perform the corresponding command or select the corresponding option)
- Enter (Perform the command for the active option or button)
- Spacebar (Select or clear the check box if the active option is a check box)
- Arrow keys (Select a button if the active option is a group of option buttons)
- F1 key (Display Help)
- F4 key (Display the items in the active list)
- Backspace (Open a folder one level up if a folder is selected in the Save As or Open dialog box)

## Microsoft Natural Keyboard Shortcuts

- Win (Display or hide the Start menu)
- Win+BREAK (Display the System Properties dialog box)
- Win+D (Display the desktop)
- Win+M (Minimize all of the windows)
- Win+Shift+M (Restore the minimized windows)
- Win+E (Open My Computer)
- Win+F (Search for a file or a folder)
- CTRL+Win+F (Search for computers)
- Win+F1 (Display Windows Help)
- Win+ L (Lock the keyboard)
- Win+R (Open the Run dialog box)
- Win+U (Open Utility Manager)

## Windows Explorer Keyboard Shortcuts

- END (Display the bottom of the active window)
- HOME (Display the top of the active window)
- NUM LOCK+* (Display all of the subfolders that are under the selected folder)
- NUM LOCK++ (Display the contents of the selected folder)
- NUM LOCK+- (Collapse the selected folder)
- LEFT ARROW (Collapse the current selection if it is expanded, or select the parent folder)
- RIGHT ARROW (Display the current selection if it is collapsed, or select the first subfolder)

## Internet Explorer Navigation

- CTRL+B (Open the Organize Favorites dialog box)
- CTRL+E (Open the Search bar)
- CTRL+F (Start the Find utility)
- CTRL+H (Open the History bar)
- CTRL+I (Open the Favorites bar)
- CTRL+L (Open the Open dialog box)
- CTRL+N (Start another instance of the browser with the same Web address)
- CTRL+O (Open the Open dialog box, the same as CTRL+L)
- CTRL+P (Open the Print dialog box)
- CTRL+R (Update the current Web page)
- CTRL+W (Close the current window)

| Move Actions | Keystroke |
|---|---|
| Beginning the line | HOME |
| End of the line | END |
| Top of the document | Ctrl +HOME |
| End the document | Ctrl +END |

| Selection | Techniques |
|---|---|
| Whole word | Double click with in the word |

| | |
|---|---|
| Whole paragraph | Triple-click within the paragraph |
| Several word or line | Drag the mouse over the words or by holding the **SHIFT** key while using arrows |
| Entire document | From the menu bar, you can choose edit and select option or **Ctrl +A** |

### Alignment

**Justify and Center by using keys:**

1. Highlight the text
2. Press Ctrl +E
3. Press Ctrl +J

### DOCUMENT ACTIONS

| Action | Keystroke |
|---|---|
| Open a file | CTRL +O |
| New file | CTRL +N |
| Close a file | CTRL +W |
| Save | CTRL +S or SHIFT +F12 |
| Save As | F12 |
| Print Preview | CTRL +F2 |
| Print | CTRL +P |
| Show/hide paragraph symbols | CTRL +* |
| Spelling and grammar | F7 |
| Help | F1 |
| Find | CTRL +F |
| Replace | CTRL +H |
| Go To | CTRL +G |

### CURSOR MOVEMENT

| Action | Keystroke |
|---|---|
| Select All – Entire Document | CTRL +A |
| Select from cursor from the beginning of the line | SHIFT +HOME |
| Select from cursor from the end of the line | SHIFT +END |
| Goto to the beginning line | HOME |
| Goto end line | END |
| Goto beginning document | CTRL +HOME |
| Goto End document | CTRL +END |

### FORMATING

| Action | Keystroke |
|---|---|
| Cut | CTRL +X |
| Copy | CTRL +C |
| Paste | CTRL +V |
| Undo | CTRL +Z |
| Redo | CTRL +Y |
| Format painter | CTRL +SHIFT +C |
| Left alignment | CTRL +L |
| Right alignment | CTRL +R |
| Justified | CTRL +J |
| Delete the previous word | CTRL +Back space |
| Apply bullet list | CTRL +SHIFT +L |
| Indent | CTRL +M |
| Page break | CTRL +Enter |

### TEXT STYLE

| Action | Keystroke |
|---|---|
| Font face | CTRL +SHIFT +F |
| Font size | CTRL +SHIFT +P |
| Bold | CTRL +B |
| Italics | CTRL +I |
| Underline | CTRL +U |
| Double underline | CTRL +SHIFT +D |
| Word underline | CTRL +SHIFT +W |
| All caps | CTRL +SHIFT +A |
| Change case | SHIFT +F3 |
| Subscript | CTRL += |
| Superscript | CTRL +SHIFT += |
| Make web hyperlink | CTRL +K |

### TABLES

| Action | Keystroke |
|---|---|
| Go to next cell | Tab |
| Go to the previous cell | SHIFT + Tab |
| Goto beginning of a column | ALT +Page up |
| High light to the beginning of a column | ALT +SHIFT + Page up |
| Go to the end of a column | ALT + Page down |
| High light to the end of a column | ALT +Shift +Page down |
| Goto beginning of row | ALT +HOME |
| High light the beginning of row | ALT +SHIFT +Home |
| Go to the end of a row | ALT +END |
| High light to the end of a row | ALT +SHIFT +END |
| Column break | CTRL +SHIFT +Enter |

### MISCELLANEOUS

| Action | Keystroke |
|---|---|
| Copy right symbol-© | ALT + CTRL +C |
| Date field | ALT + SHIFT +D |
| Goto footnotes | ALT + CTRL +F |
| Show/Hide ¶ | CTRL +SHIFT +8 |
| Thesaurus | SHIFT +F7 |

# Basics of Computer Science

1. All the field names in each record must be:
A. Meaningful. B. Unique.
C. Right. D. Both (a) and (b)
**Correct Answer:** Both (a) and (b)
**Explanation:** While keeping records, all the field names are supposed to be unique and meaningful.

2. A unit of data consisting of one or more characteristics is known as:
A. Record. B. Field.
C. File. D. None of these.
**Correct Answer:** Field.
**Explanation:** A field contains data of one or more characteristics.

3. Field names are only used as a _____ within the programs using them:
A. Names reference.
B. Cell.
C. Reference.
D. Value.
**Correct Answer:** Names reference.
**Explanation:** The purpose of field names are only for using as a name reference in programs.

4. A candidate key is also known as:
A. Secondary key. B. Primary key.
C. Alternate key. D. None of these.
**Correct Answer:** Alternate key.
**Explanation:** It is a fact.

5. When was the idea of using relational database instead of file structures proposed?
A. 1940. B. 1950.
C. 1960. D. 1970.
**Correct Answer:** 1960.
**Explanation:** In 1960 the idea of using relational database instead of file structures was proposed by the researchers.

6. Records in file management structures are known as _____ in database structures:
A. Rows. B. Tuples.
C. Both (a) and (b).
D. None of these.
**Correct Answer:** Both (a) and (b).
**Explanation:** Tuples or rows are the records that are present in file management structures.

7. An entity consists of one or more _____.
A. Tables. B. Rows.
C. Columns. D. Attributes.
**Correct Answer:** Attributes.
**Explanation:** An entity is composed of one or more attributes and each attribute must have only one value.

8. Rows are also known as:
A. Entity. B. Occurrence.
C. Records. D. Attributes.
**Correct Answer:** Records.
**Explanation:** A row in a database is also known as a record.

9. Columns are also known as:
A. Attributes. B. Records.
C. Occurrence. D. Entity.
**Correct Answer:** Attributes.
**Explanation:** A column in a database is also known as an attribute.

10. Point out the property of a relation:
A. Contains large data.
B. Contains rows and columns.
C. No duplicate rows exist
D. All of these.
**Correct Answer:** No duplicate rows exist
**Explanation:** It is the property of a relation that no two rows can be identical.

11. Among the following, which is a non-unique field?
A. Primary key. B. Secondary key
C. Candidate key. D. Alternate key.
**Correct Answer:** Secondary key
**Explanation:** A secondary key is a non-unique field that is used as a secondary key.

12. Composite and sort are the properties of which keys.
A. Primary keys. B. Secondary keys.
C. Candidate keys. D. None of these.
**Correct Answer:** Candidate keys.
**Explanation:** A candidate key must possess the above discussed properties.

13. Views are created using:
A. Indexes. B. Keys.
C. SQL. D. FMS.
**Correct Answer:** SQL.
**Explanation:** Views are created using SQL which is a powerful database language.

14. A person who uses the computer for his specific needs is known as:
A. A programmer. B. A user.
C. An end-user. D. Both (b) and (c).
**Correct Answer:** Both (b) and (c).
**Explanation:** A person who is using a computer for his specific needs is known as a user or an end-user.

15. Who is responsible for the entire data of an organization?
A. Data administrator.
B. Data handler.
C. Database administrator.
D. All of these.
**Correct Answer:** Data administrator.
**Explanation:** A data administrator (DA) is a person responsible for the entire data of an organization.

16. Where is the operating system of a computer system installed?
A. RAM B. ROM
C. Hard disk D. ALU
**Correct Answer:** Hard disk
**Explanation:** In computers, Operating System is installed and stored on the hard disk. But as the data access from the hard disk is very slow, just after the computer is started OS is copied into RAM from the hard disk.

17. What is the complete form for CLI?
A. Computer linked interface
B. Command line interface
C. Caller identified interface
D. None
**Correct Answer:** Command line interface
Explanation: Fact.

18. All of these are GUI operating systems except?
A. Windows B. Solaris
C. Linux D. DOS
**Correct Answer:** DOS

19. An operating system provides a/an _____ to interact with user.
A. Software. B. Interface.
C. Command. D. Document
**Correct Answer:** Interface.
**Explanation:** An operating system provides a connection to interact with user. Without an operating system a computer is useless.

20. Which of these acts as a moderator between the computer resources and the user?
A. Application software
B. Operating system
C. Hardware devices
D. None of the above
**Correct Answer:** Operating system
**Explanation:** Operating systems like MS Windows ensure fair usage my managing the system resources with the user, application software and hardware devices.

21. Operating system has _____ types.
A. Four. B. Three.
C. Two. D. One
**Correct Answer:** Two.
**Explanation:** It is a fact.

22. Which of these is not a scanning device?
A. Bar-code reader
B. Smart cards
C. Audio input device
D. None of these
**Correct Answer:** None of these
**Explanation:** All of these are examples of scanning devices.

23. Which of these display adapters supports highest resolution?
A. VGA B. SVGA
C. XGA
D. Electro luminescent display
**Correct Answer:** XGA
**Explanation:** XGA (Extended graphics adapter) supports the highest resolution i.e. 1024 x 768 pixels. Electroluminescent display is not a graphics adapter.

24. Which of these is a non-impact printer?
A. Line printer
B. Ink-jet printer
C. Dot-matrix printer
D. None of these
**Correct Answer:** Ink-jet printer
**Explanation:** Ink-jet printer is a non-impact printer, which sprays electrically charged ink droplets at high speed to form an image on the paper.

25. Unix is an example of _____.
A. GUI operating system.
B. Computer virus.
C. Hardware.
D. Command line operating system.
**Correct Answer:** Command line operating system.
**Explanation:** Unix is an operating system which follows a command line interfacing. It interacts with a computer program when a user commands the program through a series of text commands.

26. How many kilobytes are there in 240 megabytes?
A. 240000 B. 24000
C. 245760 D. 2457600

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**Correct Answer:** Command line operating system.
**Explanation:** Unix is an operating system which follows a command line interfacing. It interacts with a computer program when a user commands the program through a series of text commands.

26. How many kilobytes are there in 240 megabytes?
A. 240000 B. 24000
C. 245760 D. 2457600

**Correct Answer:** 245760
**Explanation:** Total KBs in 1 MB are $2^{10}$. Therefore, the correct ans is 240 x $2^{10}$, i.e. 245760.

27. Which of these has 240 bytes?
A. GB B. TB
C. PB D. MB
**Correct Answer:** TB
**Explanation:** 1 Tera byte has $2^{40}$ bytes.

28. Which of these statements best describes application software?
A. It fetches user data and processes it to give output.
B. It sends the user data to the RAM for further processing.
C. It interacts with the user and sends instructions to the CPU to perform a specific task.
D. It manages different resources of the computer to give user-desired output.
**Correct Answer:** It interacts with the user and sends instructions to the CPU to perform a specific task.
**Explanation:** The application software is basically a set of programs that are designed to carry out specific tasks as instructed by the user. The application software then sends data to the CPU to manipulate and implement the instructions to finally give the output.

29. What is the highest unsigned integer value that an 8-bit computer can determine?
A. 27 B. 28
C. 27 – 1 D. 28 - 1
**Correct Answer:** 28 - 1
**Explanation:** The total no of values that can be represented by 8-bits are $2^8$. However, the highest value that can be represented is $2^8$ -1, since 0 itself is an integer value too.

30. LAN is the abbreviation of:
A. Linking Area Network
B. Large Area Network
C. Local Area Network
D. Live Area Network
**Correct Answer:** Local Area Network
**Explanation:** Fact

31. The Internet tool, FTP, is used for what?
A. File sharing B. Chatting
C. Video calling D. All of the above
**Correct Answer:** File sharing
**Explanation:** FTP stands for File Sharing protocol that allows the downloading and uploading of files.

32. Which of these networks is used for collaboration between companies without giving unwanted access to outsiders?
A. Internet B. Extranet
C. Intranet D. None of these
**Correct Answer:** Extranet
**Explanation:** Extranet is when two or more companies connect their privately-owned secure business networks in order to share information without outsiders able to access it.

33. Which of these is the fastest method for connecting LAN?
A. Wire pairs B. Coaxial cables
C. Fiber optics
D. Wireless transmitters
**Correct Answer:** Fiber optics
**Explanation:** Fiber optics ensure the fastest communication and they are the most power efficient too. Wireless connections are usually slower and also limit the distances between nodes.

34. Which of these is not a component of LAN?
A. NIC B. Bridge
C. Gateway D. None of them
**Correct Answer:** None of them
**Explanation:** All of these are components of a LAN.

35. Why is it likely that the nodes (computers) will begin transmitting at the same time?
A. They have fixed transmitting times
B. Transmitting times are user defined
C. Transmitting times are random
D. Each node has its own token
**Correct Answer:** Transmitting times are random
**Explanation:** Token has to deal with device's ability to access the network at a time, not related to the transmission by the nodes. Transmission times are random. Even if two nodes transmit at the same time, both the nodes wait for a random time before transmitting again, which makes it less likely that they transmit at the same time again.

36. Which of these is not a function of TCP/IP?
A. Ensures a reliable connection between two computers over the internet
B. Defines a mechanism by which every computer on the Internet is identified separately
C. It can send and receive data over the internet
D. All of these are functions of TCP/IP
**Correct Answer:** All of these are functions of TCP/IP
**Explanation:** Fact.

37. Which of these is not used as a source of communication in WAN?
A. Telephone lines B. Satellite links
C. Microwaves D. All are used

**Correct Answer:** All are used
**Explanation:** Fact

38. Which of these is not true about peer-to-peer computer network?
A. One computer has control over others
B. Information sharing is made possible for each computer
C. These are not secure networks
D. The networks are slow
**Correct Answer:** One computer has control over others
**Explanation:** In peer-to-peer computer network, all computers are inter-connected and have an equal status. This is why no single computer has control over the others, unlike the client-server network.

39. Which of these topologies has the highest fault tolerance?
A. Tree B. Mesh
C. Bus D. Ring
**Correct Answer:** Mesh
**Explanation:** In mesh topology, there are multiple connections within the network. Therefore, even if there is a fault in any single connection, an alternate route to the target device can be found due to multiple links.

40. The first successful series of windows was _____.
A. Windows 3.x series.
B. Windows 95.
C. Windows 98
D. Windows 2000.
**Correct Answer:** Windows 3.x series.
**Explanation:** Microsoft Corporation released its first successful series of Windows named Windows 3.x series which was not an operating system but had an operating environment that provided a GUI.

41. Windows 98 was released in year _____.
A. 1995. B. 1996.
C. 1990. D. 1998.
**Correct Answer:** 1998.
**Explanation:** It is a fact.

42. Which of the following windows is based on NT technology?
A. Windows 98. B. Windows 2000.
C. Windows 95.
D. Windows 3.x series.
**Correct Answer:** Windows 2000.
**Explanation:** All the recent version of Windows including Windows 2000 are based on NT technology.
All the recent version of Windows including Windows 2000 are based on NT technology.

43. In a mouse, _____ click is used to select graphical objects.
A. Drag. B. Left.
C. Right. D. None of these.
**Correct Answer:** Left.
**Explanation:** When we click the left button of the mouse, graphical objects like file icon or text is selected in a document.

44. Which of the following windows is a multitasking operating system?
A. Windows 2000. B. Windows 95.
C. Windows 98.
D. Windows 3.x series.
**Correct Answer:** Windows 2000.
**Explanation:** Windows 2000 has the capability to load multiple programs into the memory at a time.

45. How many percent of the personal computers have word processor installed?
A. 60% B. 70%
C. 80% D. 90%
**Correct Answer:** 90%
**Explanation:** A word processing software is the most frequently used software and 90% of the computers have this software installed in it.

46. Windows usually create how many types of partitions?
A. Five. B. Four
C. Three. D. Two.
**Correct Answer:** Two.
**Explanation:** Windows usually create two basic partitions known as primary and extended partition.

47. All kinds of text-based documents are created with the help of _____.
A. Word Processor.
B. MS Excel.
C. Power point.
D. All of these.
**Correct Answer:** Word Processor.
**Explanation:** A word processor is a software with the help of which we are able to create all kinds of text-based documents.

48. Files are recognized by their _____ in Microsoft windows.
A. Size. B. Type.
C. Extension. D. Path.
**Correct Answer:** Extension.
**Explanation:** Files are always recognized by their extension in Microsoft Windows.

49. Disk management also indicates which of the following?
A. Which drive has system partition.
B. Shows file extension.
C. Location of files.
D. None of these.
**Correct Answer:** Which drive has system partition.
**Explanation:** Along with finding the size of the drive and file system at a glance, a disk management also indicates which of the drive contains the system partition.

50. Which of the following is a great advantage of word processing?
A. You can cut paste a document easily.
B. You can copy paste a document easily.
C. You can make changes without retyping the entire document.
D. All of these.
**Correct Answer:** You can make changes without retyping the entire document.
**Explanation:** If you are using a word processor, the best advantage that you can get over a typewriter is that you can make any kind of changes in the whole document without ever retyping the whole document.

51. With windows explorer, you can manage
A. Just local files.
B. Just folders and drives.
C. Just remote files and folders.
D. All of these.
**Correct Answer:** All of these.
**Explanation:** The purpose of a windows explorer is to manage all the above.

52. What is the purpose of Document Windows?
A. Allows you to edit a document.
B. Allows you to edit two or more documents at the same time.
C. Allows you to edit document in different times.
D. None of these.
**Correct Answer:** Allows you to edit two or more documents at the same time.
**Explanation:** A word document is used for editing two or more documents simultaneously. The document appears in a separate windows.

53. To understand the working of a word processor, you should be familiar with its _____.
A. Interface. B. Editing
C. Formatting D. All of these.
**Correct Answer:** Interface.
**Explanation:** A word processor can only be used efficiently by a user, if a user is familiar with its interface.

54. What is the purpose of the title bar?
A. To show the date.
B. To show messages at the bottom.
C. Displays the name of active application.
D. Displays the positioning of text and tabs.
**Correct Answer:** Displays the name of active application.
**Explanation:** The purpose of a title bar is to display the name of the application that is currently active. The name is always displayed on the top of a window.

55. A blinking insertion point also known as the cursor is displayed at the _____ corner of the screen.
A. Top right. B. Top left.
C. Extreme right. D. Extreme left.
**Correct Answer:** Top left.
**Explanation:** In a word processor, a cursor is always placed at the top left corner of the screen.

56. There are _____typing modes.
A. Four. B. Three.
C. Two. D. None of these.
**Correct Answer:** Two.
**Explanation:** All word processors have two typing modes, insertion mode and overtype mode.

57. Which of the following keys is used while using the arrow buttons to select the text?
A. Caps lock key. B. Num lock key.
C. Alt key. D. Shift key.
**Correct Answer:** Shift key.
**Explanation:** A shift key when used with arrow buttons enables a user to select a text in a word processor.

58. A user can manipulate a printing job in multiple ways by
A. Single clicking on printer icon.
B. Double clicking on printer icon.
C. Dragging the printer icon.
D. None of these.
**Correct Answer:** Double clicking on printer icon.
**Explanation:** A user can use a printing job in more than one way by double clicking on the printer icon.

59. Formatting of a text includes
A. Erasing of a text.
B. Changing the appearance of a text.
C. Adding pictures and graphics in a text.
D. All of these.
**Correct Answer:** All of these.
**Explanation:** Formatting a document includes erasing, changing appearance, adding pictures and graphics in a text.

60. Which of the following can also be shared on a network.
A. Printer. B. Speaker.
C. Keyboard. D. Monitor.
**Correct Answer:** Printer.
**Explanation:** Printer is such a device that can be shared with others with the help of a network.

61. What is the purpose of indents?
A. To add spaces between paragraphs.
B. To determine the distance of each line of a paragraph to margins.
C. To define boundaries of a text
D. To align a text or a document.
**Correct Answer:** To determine the distance of each line of a paragraph to margins.
**Explanation:** In a word processor, the purpose of indents are to determine the distance of each line of a paragraph to the margins.

62. Keyboard events are of _____ types.
A. Four. B. Three.
C. Two. D. One.
**Correct Answer:** Two.
**Explanation:** Keyboard events are such actions that can be performed with the help of a keyboard and these events or actions are of two types, key up and key down.

63. You can permanently delete or restore items from
A. My computer. B. Desktop.
C. Recycle Bin. D. Hard drive
**Correct Answer:** Recycle Bin.
**Explanation:** A recycle bin is used to permanently delete an item. Deleted items can also be restored from the recycle bin.

64. Which of the following document is created by windows on installation time.
A. My Documents. B. MS Excel.
C. MS Word. D. None of these.
**Correct Answer:** My Documents.
**Explanation:** At the time of installing windows, my documents is created as a default folder by windows for storing different kinds of documents.

65. A tab stop is measured from
A. Left to right. B. Right to left
C. Up to down. D. Down to up.
**Correct Answer:** Left to right.
**Explanation:** A tab stop is a position in a document that is always measured from left to right.

66. When can the hard disk be divided into multiple partitions?
A. Any time.
B. While installing windows.
C. After installing windows.
D. Never.
**Correct Answer:** While installing windows.
**Explanation:** Hard disk can only be divided into multiple partitions when the windows are being installed.

67. The easiest way to create a table on a word processor is
A. To create from menu bar.
B. To draw yourself.
C. Both (a) and (b).
D. None of these.
**Correct Answer:** To create from menu bar.
**Explanation:** The easy way to create a table is to go to the menu bar and select the insert table option and mention the number of rows and columns.

68. _____ is an on-screen work area.
A. My computer. B. My Documents.
C. Desktop.
D. Internet explorer.
**Correct Answer:** Desktop.
**Explanation:** Desktop is an area which has windows, icons, menus and dialogue box appears. It is an on-screen area of work.

69. A clipboard is a _____ space.
A. Permanent holding.
B. Temporary holding.
C. Editing.
D. None of these.
**Correct Answer:** Temporary holding.
**Explanation:** A clipboard is a temporary holding space that is used for storing text, graphics and other data for a while.

70. Which of the following is an example of GUI.
A. Solaris. B. Windows
C. Unix. D. Both (a) and (b).
**Correct Answer:** Both (a) and (b).
**Explanation:** Solaris and windows are the examples of a graphical user interface that establishes the user communication with the computer.

71. Which of the following is thought of as painted pictures?
A. Permanent holding.
B. Temporary holding.
C. Editing.
D. None of these.
**Correct Answer:** Temporary holding.
**Explanation:** A clipboard is a temporary holding space that is used for storing text, graphics and other data for a while.

72. Which of the following is thought of as painted pictures?
A. Vector images. B. Printed images
C. Bitmap images. D. None of these.
**Correct Answer:** Bitmap images.
**Explanation:** Bitmap graphics or images are also considered as painted pictures in a word processor.

73. A spreadsheet is a grid of
A. Only rows.
B. Only columns.
C. Rows and columns.
D. None of these.
**Correct Answer:** Rows and columns.
**Explanation:** A spreadsheet holds large amount of data arranged in rows and columns.

74. The purpose of Auto shapes toolbar is to
A. Draw simple shapes.
B. Draw different geometrical shapes.
C. Draw arrows, stars and banners.
D. Both (b) and (c).
**Correct Answer:** Both (b) and (c).
**Explanation:** Auto shape toolbar has a lot of different options that enables a user to draw different geometrical shapes and also other things like drawing arrows, stars and banners.

75. A collection of related worksheets is known as
A. Workbook. B. Worksheet.
C. Work pad. D. Notepad.
**Correct Answer:** Workbook.
**Explanation:** A workbook in a spreadsheet is a combination or collection of worksheets that are related to one another.

76. Vector graphics are also known as
A. Line drawings.
B. Painted pictures.
C. Arrows.
D. None of these.
**Correct Answer:** Line drawings.
**Explanation:** MS word contains two main tools for manipulating graphics. Bitmap graphics and vector graphics. Vector graphics are also known as line drawings.

77. Where is the data entered in a worksheet?
A. Rows. B. Columns.
C. Cells. D. Both (a) and (b).
**Correct Answer:** Cells.
**Explanation:** In a worksheet, cell is the basic unit where data is entered.

78. Redo means
A. To erase a document.
B. To reverse the previous undo.
C. To insert a word.
D. None of these.
**Correct Answer:** To reverse the previous undo.
**Explanation:** The purpose of redo in a word document is to reverse the undo (reverse the changes you have made to the document).

79. What indicates an active cell?
A. A bold rectangular border.
B. A bold Square border.
C. Both (a) and (b).
D. None of these.
**Correct Answer:** A bold rectangular border.
**Explanation:** Using a mouse or an arrow key, a cell is made active and a bold rectangular border indicates it.

80. To switch to different font style, the toolbar has _____ buttons.
A. Combine. B. Only one.
C. Separate. D. None of these.
**Correct Answer:** Separate.
**Explanation:** There are different font styles that can be selected in a word processor and they can be selected from formatting toolbar. The toolbar has separate buttons for these options.

81. The delete key erases the character to the _____ of cursor.
A. Left B. Right
C. Both (a) and (b).
D. None of these.
**Correct Answer:** Right
**Explanation:** The delete key is used to erase the cursor to the right.

82. Calling cells just by their addresses is known as
A. Cell reference.
B. Labelling.
C. Relative referencing.
D. Absolute referencing.
**Correct Answer:** Relative referencing.
**Explanation:** If we are calling a cell only be their addresses for example "A1" then it is known as relative referencing.

83. If you place a $ sign within the cell addresses in the formula it is known as
A. Absolute referencing.
B. Relative referencing.
C. Ranges.
D. Labelling.
**Correct Answer:** Absolute referencing.
**Explanation:** An absolute referencing is to add a dollar sign within the cell addresses so that when an addition formula in cell one is copied to cell 2, it will not change.

84. What is the distinguishing feature of a spreadsheet program?
A. It does calculations.
B. It creates execute functions.
C. It creates mathematical formulas.
D. Both (b) and (c).
**Correct Answer:** Both (b) and (c).
**Explanation:** The distinguishing feature of a spreadsheet program is to create mathematical formulas and execute all the functions.

85. Functions are built-in formulas used to
A. Perform complex operations.
B. Do addition.
C. Do subtraction.
D. None of these.
**Correct Answer:** Perform complex operations.
**Explanation:** Functions are built-in formulas that are used to perform complex operations.

86. The default number format assigned to a cell is known as _____ format.
A. Custom format.
B. General format.
C. Currency format.
D. None of these.
**Correct Answer:** General format.
**Explanation:** In a general format, the default number format is assigned to a cell.

87. Every part of a number format is separated from the other with the help of
A. Full stop. B. Comma.
C. Hyphen. D. Semicolon.
**Correct Answer:** Semicolon.
**Explanation:** A number format has four parts and every part is separated from one another with the help of a semicolon.

88. Alignment of the cell contents can be changed with the help of
A. Dialog box. B. Alignment tab.
C. Wrap text. D. Merge cells.
**Correct Answer:** Alignment tab.
**Explanation:** Every cell content can be aligned with the help of alignment tab.

89. Charts allow you to present data into the worksheet in a _____ format.
A. Visual. B. Oriented.
C. Organized. D. All of these.
**Correct Answer:** Visual.
**Explanation:** The purpose of charts is to present data into the worksheet in a visual format using different types of graphs.

90. We can add headers and footers to the page by clicking _____.
A. Header tab B. Footer tab.
C. Drop-down menu.
D. None of these
**Correct Answer:** Drop-down menu.
**Explanation:** We can add headers and footers to the page by clicking the drop-down menus under the Header/Footer tab.

91. After you are done setting the page format, select _____ option to print the worksheet.
A. File/Print. B. Print
C. File D. All of these.
**Correct Answer:** File/Print.
**Explanation:** Worksheet is printed by selecting the file/print option from the menu.

92. Labels are used to identify _____:
A. Whole numbers.
B. A value or a series of values.
C. Decimals.
D. Negative numbers.
**Correct Answer:** A value or a series of values.
**Explanation:** Labels are used to identify a value and a value can be a whole number or decimal or even a negative number.

# ELECTRONIC RECORD KEEPING

1. Which of the following is an example of structured electronic data in record keeping?
a) Scanned images of handwritten notes
b) PDF files
c) Spreadsheets with organized columns and data
d) Audio recordings
Answer: c) Spreadsheets with organized columns and data
**Explanation:** Structured electronic data typically includes organized and formatted information, such as data in spreadsheets.

2. What does the term "OCR" stand for in the context of electronic record keeping?
a) Original Copy Retrieval
b) Optical Character Recognition
c) On-Demand Cloud Resources
d) Online Communication Registry
Answer: b) Optical Character Recognition
**Explanation:** OCR is a technology that converts scanned documents or images into machine-readable text.

3. In electronic record keeping, what is the primary goal of disaster recovery planning?
a) To intentionally delete records
b) To prevent unauthorized access to records
c) To ensure data and records are recoverable in the event of a disaster
d) To increase data storage capacity
Answer: c) To ensure data and records are recoverable in the event of a disaster
**Explanation:** Disaster recovery planning aims to ensure data and records can be recovered in case of catastrophic events.

4. What is the term for the process of converting electronic records into a standard format to ensure long-term accessibility?
a) Digitalization
b) Standardization
c) Digital preservation
d) Data compression
Answer: c) Digital preservation
**Explanation:** Digital preservation involves converting electronic records into standard formats to ensure long-term accessibility.

5. Which of the following is a characteristic of a well-organized electronic record management system?
a) Lack of access controls
b) No document categorization
c) Chaotic folder structures
d) Logical and consistent folder structures
Answer: d) Logical and consistent folder structures
**Explanation:** A well-organized system includes logical and consistent folder structures for easy access and retrieval.

6. What is the term for records that must be retained for legal or regulatory compliance?
a) Redundant records
b) Mandatory records
c) Retention records
d) Non-essential records
Answer: b) Mandatory records
**Explanation:** Mandatory records are those that must be retained to comply with legal or regulatory requirements.

7. How can encryption be used to enhance the security of electronic records?
a) By making records easier to access
b) By preventing unauthorized access to records
c) By increasing storage space
d) By simplifying data deletion
Answer: b) By preventing unauthorized access to records
**Explanation:** Encryption is used to protect electronic records and prevent unauthorized access.

8. What is the purpose of access controls in electronic record keeping?
a) To store records in multiple locations
b) To monitor all changes to records
c) To restrict who can view, edit, or delete records
d) To increase data accuracy
Answer: c) To restrict who can view, edit, or delete records
**Explanation:** Access controls are used to limit access to electronic records, ensuring only authorized users can view or modify them.

9. Which of the following is NOT a common challenge associated with electronic record keeping?
a) Data security concerns
b) Data loss prevention
c) Data organization and retrieval issues
d) Data privacy compliance

Answer: b) Data loss prevention
**Explanation:** Data loss prevention is a goal in electronic record keeping, not a common challenge.

10. What is the term for the process of ensuring electronic records are not altered or tampered with over time?
a) Digital conversion
b) Data duplication
c) Data integrity
d) Digital preservation
Answer: c) Data integrity
**Explanation:** Data integrity ensures electronic records are not altered or tampered with over time.

11. What technology is often used to capture, index, and store large volumes of documents and records electronically?
a) Data mining
b) Digital forensics
c) Document management systems
d) Data compression
Answer: c) Document management systems
**Explanation:** Document management systems are used to capture, index, and store large volumes of documents and records electronically.

12. What is a common method to authenticate a user's identity when accessing electronic records?
a) Using a username and password
b) Typing the record's title
c) Sharing the record on social media
d) Copying and pasting the record
Answer: a) Using a username and password
**Explanation:** User authentication with a username and password is a common method for accessing electronic records securely.

13. What is the primary goal of data classification in electronic record keeping?
a) To organize data by size
b) To categorize data by its importance and sensitivity
c) To create redundant copies of data
d) To reduce data storage costs
Answer: b) To categorize data by its importance and sensitivity
**Explanation:** Data classification categorizes data based on its importance and sensitivity for proper handling.

14. Which law or regulation focuses on the protection of individuals' personal data and can impact electronic record keeping?
a) GDPR (General Data Protection Regulation)
b) SOX (Sarbanes-Oxley Act)
c) HIPAA (Health Insurance Portability and Accountability Act)
d) DMCA (Digital Millennium Copyright Act)
Answer: a) GDPR (General Data Protection Regulation)
**Explanation:** GDPR is a regulation that focuses on the protection of individuals' personal data, impacting record keeping practices.

15. What is the purpose of a digital signature in electronic record keeping?
a) To encrypt the entire record
b) To make the record visually appealing
c) To ensure the record is never deleted
d) To authenticate the identity of the signer and ensure the integrity of the record
Answer: d) To authenticate the identity of the signer and ensure the integrity of the record
**Explanation:** A digital signature is used to verify the identity of the signer and ensure the record's integrity.

16. In electronic record keeping, what does the term "redaction" refer to?
a) The process of converting paper records to digital format
b) The process of creating backups
c) The process of removing or masking sensitive information from a record
d) The process of organizing records into categories
Answer: c) The process of removing or masking sensitive information from a record
**Explanation:** Redaction is the process of obscuring or removing sensitive information from a record.

17. What is the purpose of version control in electronic record keeping?
a) To prevent access to records
b) To maintain a historical record of changes and revisions
c) To reduce file size
d) To encrypt records

Answer: b) To maintain a historical record of changes and revisions
**Explanation:** Version control is used to track and record changes and revisions made to electronic records over time.

18. Which of the following is an example of unstructured electronic data in record keeping?
a) Database records with well-defined fields
b) Email messages
c) PDF files
d) Spreadsheets with organized columns
Answer: b) Email messages
**Explanation:** Unstructured electronic data includes information like email messages without well-defined fields.

19. What is the term for the physical or virtual location where electronic records are stored?
a) File path
b) Data migration
c) Data backup
d) Data center
Answer: d) Data center
**Explanation:** Data centers are physical or virtual locations where electronic records are stored.

20. What is the purpose of data backup in electronic record keeping?
a) To permanently delete records
b) To archive records for long-term storage
c) To make copies of records for recovery in case of data loss
d) To categorize records into folders
Answer: c) To make copies of records for recovery in case of data loss
**Explanation:** Data backups are created to make copies of records for recovery in case of data loss.

21. What is the term for the process of permanently deleting electronic records that are no longer needed?
a) Data migration
b) Data backup
c) Data destruction
d) Data encryption
Answer: c) Data destruction
**Explanation:** Data destruction is the process of permanently deleting electronic records that are no longer needed.

22. Which of the following is a common method for ensuring the authenticity and integrity of electronic records?
a) Digital signatures
b) Redaction
c) File compression
d) Data duplication
Answer: a) Digital signatures
**Explanation:** Digital signatures are used to ensure the authenticity and integrity of electronic records by providing a cryptographic proof of the origin and content of the record.

23. In the context of electronic record keeping, what does the term "metadata" refer to?
a) Data that is stored redundantly
b) Information about the record, such as its creation date and author
c) The main content of the record
d) Data that is encrypted
Answer: b) Information about the record, such as its creation date and author
**Explanation:** Metadata in electronic record keeping refers to information about the record, including details like when it was created and who authored it.

24. What is the purpose of data retention policies in electronic record keeping?
a) To keep all electronic records indefinitely
b) To categorize records into folders
c) To define how long records should be retained and when they should be deleted
d) To store records in physical filing cabinets
Answer: c) To define how long records should be retained and when they should be deleted
**Explanation:** Data retention policies specify how long electronic records should be retained and when they should be deleted or archived.

25. What is a key benefit of cloud-based electronic record keeping systems?
a) Lower upfront costs
b) Limited accessibility
c) Inflexible storage options
d) Slower data retrieval
Answer: a) Lower upfront costs
**Explanation:** Cloud-based systems often have lower upfront costs compared to traditional in-house storage systems.

26. What is the primary purpose of electronic record keeping?

a) To save paper
b) To preserve and manage information
c) To reduce electricity consumption
d) To increase data security
Answer: b) To preserve and manage information
**Explanation:** Electronic record keeping is primarily used to preserve and manage information efficiently.

27. Which of the following is an advantage of electronic record keeping over paper-based systems?
a) Limited storage capacity
b) Susceptibility to physical damage
c) Easy retrieval and search capabilities
d) No need for backup
Answer: c) Easy retrieval and search capabilities
**Explanation:** Electronic records can be easily searched, organized, and retrieved, making them more efficient than paper records.

28. What is metadata in the context of electronic record keeping?
a) A type of encryption technique
b) Data stored on a physical medium
c) Information about a record's characteristics and history
d) A method of data compression
Answer: c) Information about a record's characteristics and history
**Explanation:** Metadata is data that describes other data, providing information about a record's attributes and history.

29. Which of the following is a key challenge in electronic record keeping?
a) Improved data accuracy
b) Reduced storage costs
c) Data security and privacy concerns
d) Faster data entry
Answer: c) Data security and privacy concerns
**Explanation:** Ensuring data security and privacy is a significant challenge in electronic record keeping.

30. What is a backup strategy commonly used to safeguard electronic records?
a) Printing all records
b) Regularly creating data backups
c) Encrypting records
d) Sharing records on social media
Answer: b) Regularly creating data backups
**Explanation:** Regularly backing up electronic records is a common strategy to safeguard them from data loss.

31. In electronic record keeping, what is version control used for?
a) To restrict access to records
b) To keep track of changes and revisions
c) To store records in multiple locations
d) To reduce file size
Answer: b) To keep track of changes and revisions
**Explanation:** Version control is used to track changes and revisions made to electronic records.

32. Which law or regulation often requires organizations to maintain specific electronic records for a certain period?
a) GDPR (General Data Protection Regulation)
b) HIPAA (Health Insurance Portability and Accountability Act)
c) SOX (Sarbanes-Oxley Act)
d) DMCA (Digital Millennium Copyright Act)
Answer: c) SOX (Sarbanes-Oxley Act)
**Explanation:** The Sarbanes-Oxley Act requires certain organizations to maintain financial and accounting records for specific periods.

33. What is the term used to describe the process of converting paper records into electronic format?
a) Digitization
b) Decryption
c) Data archiving
d) Printing
Answer: a) Digitization
**Explanation:** Digitization is the process of converting paper records into electronic format.

34. Which of the following is NOT a common electronic record format?
a) PDF (Portable Document Format)
b) JPEG (Joint Photographic Experts Group)
c) MP3 (MPEG-1 Audio Layer 3)
d) TXT (Plain Text)
Answer: c) MP3 (MPEG-1 Audio Layer 3)
**Explanation:** MP3 is a digital audio format, not typically used for general electronic record keeping.

35. What is the purpose of an audit trail in electronic record keeping?

a) To track the physical location of records
b) To monitor and record all changes and accesses to records
c) To create a digital archive of records
d) To organize records into categories
Answer: b) To monitor and record all changes and accesses to records
**Explanation:** An audit trail is used to track and record changes and accesses to electronic records, providing a history of actions.

36. Which of the following is a characteristic of a well-structured electronic record management system?
a) Lack of access controls
b) Poor organization and categorization of records
c) Redundant and unnecessary data storage
d) Clear access controls and data retention policies
Answer: d) Clear access controls and data retention policies
**Explanation:** A well-structured electronic record management system includes clear access controls and data retention policies.

37. What is the term for the process of ensuring that electronic records remain accessible and usable over time?
a) Data encryption
b) Data archiving
c) Data migration
d) Data deletion
Answer: c) Data migration
**Explanation:** Data migration involves the process of ensuring that electronic records remain accessible and usable over time as technology evolves.

38. Which of the following is a benefit of electronic signatures in record keeping?
a) Increased data security
b) Reduced storage costs
c) Improved data accuracy
d) Easier forgery of records
Answer: a) Increased data security
**Explanation:** Electronic signatures can enhance data security by providing authentication and non-repudiation.

# EMAIL

1. Which of the following is an essential component of an email address?
   a) Phone number
   b) @ symbol
   c) Physical address
   d) Social security number
   Answer: b) @ symbol
   **Explanation:** The "@" symbol is essential in an email address, separating the user's name from the domain.

2. What does "HTML" stand for in the context of email formatting?
   a) HyperText Markup Language
   b) Highly Technical Mail Link
   c) Hyperlink Text Management Layer
   d) Hypertext Transfer Language
   Answer: a) HyperText Markup Language
   **Explanation:** HTML is used in email formatting to create rich text and hyperlinks.

3. When composing an email, what does "CC" stand for?
   a) Copy Copy
   b) Cross Check
   c) Carbon Copy
   d) Compose Correct
   Answer: c) Carbon Copy
   **Explanation:** "CC" stands for Carbon Copy, indicating additional recipients of the email.

4. What is the primary function of an email subject line?
   a) To encrypt the email
   b) To specify the sender's name
   c) To indicate the email's importance
   d) To provide a brief description of the email's content
   Answer: d) To provide a brief description of the email's content
   **Explanation:** The email subject line summarizes the content of the email.

5. Which type of email service allows you to access your messages even without an internet connection?
   a) Webmail
   b) POP3
   c) IMAP
   d) SMTP
   Answer: b) POP3
   **Explanation:** POP3 (Post Office Protocol version 3) is designed for offline email access.

16. What is a "mailing list" in the context of email communication?
    a) A list of email addresses for spamming
    b) A group of recipients who receive the same email
    c) A list of email servers
    d) A list of email attachments
    Answer: b) A group of recipients who receive the same email
    **Explanation:** A mailing list is a group of recipients who receive the same email message.

17. What is the primary purpose of a "read receipt" in email communication?
    a) To confirm that an email was sent
    b) To confirm that an email was received and opened
    c) To prevent spam emails
    d) To encrypt email content
    Answer: b) To confirm that an email was received and opened
    **Explanation:** A read receipt is used to confirm that the recipient received and opened the email.

18. What is the purpose of the "Out of Office" or "Vacation" auto-reply in email?
    a) To send a copy of the email to the sender
    b) To automatically delete incoming emails
    c) To inform senders that the recipient is unavailable
    d) To encrypt email attachments
    Answer: c) To inform senders that the recipient is unavailable
    **Explanation:** An "Out of Office" auto-reply is used to inform senders that the recipient is currently unavailable.

19. In email, what does "URL" stand for?
    a) Uniform Resource Locator
    b) Universal Receiver List
    c) User Registration Link
    d) United Resource Location
    Answer: a) Uniform Resource Locator
    **Explanation:** "URL" stands for Uniform Resource Locator, and it is used to specify the web address linked in an email.

20. Which of the following is NOT a common email attachment file format?
a) PDF
b) JPEG
c) TXT
d) ZIP
Answer: c) TXT
**Explanation:** TXT (Plain Text) files are common in email, but they are typically not sent as attachments.

21. What is a "phishing" email?
a) An email that contains humor and jokes
b) An email from a family member
c) A fraudulent email attempting to trick recipients into revealing personal information
d) An email that contains valuable discounts
Answer: c) A fraudulent email attempting to trick recipients into revealing personal information
**Explanation:** Phishing emails are deceptive and aim to obtain personal information.

22. What is the purpose of the "Trash" or "Deleted Items" folder in email?
a) To store important emails
b) To automatically forward emails
c) To temporarily hold deleted emails before permanent deletion
d) To automatically encrypt attachments
Answer: c) To temporarily hold deleted emails before permanent deletion
**Explanation:** The Trash or Deleted Items folder temporarily holds deleted emails before they are permanently removed.

23. Which type of email service is accessible through a web browser and doesn't require a dedicated email client?
a) IMAP
b) POP3
c) Webmail
d) SMTP
Answer: c) Webmail
**Explanation:** Webmail services are accessible through a web browser and do not require dedicated email clients.

24. What is the primary function of the "Inbox" in email?
a) To store drafts of unsent emails
b) To organize sent emails
c) To receive and store incoming emails
d) To hold emails marked as spam
Answer: c) To receive and store incoming emails
**Explanation:** The Inbox is where incoming emails are received and stored.

25. What does "IMAP" stand for in email terminology?
a) Internet Message Access Protocol
b) Integrated Mail Application Platform
c) Internal Mail Attachment Protocol
d) Internet Message Authorization Process
Answer: a) Internet Message Access Protocol
**Explanation:** IMAP stands for Internet Message Access Protocol, used for accessing emails on mail servers.

26. What does the term "CC" stand for in the context of email?
a) Copy Category
b) Courtesy Copy
c) Copy Control
d) Central Copy
Answer: b) Courtesy Copy
**Explanation:** "CC" stands for Courtesy Copy and is used to send a copy of an email to additional recipients.

27. Which of the following is NOT typically found in the email header?
a) Sender's name and email address
b) Recipient's name and email address
c) Subject of the email
d) Main body of the email
Answer: d) Main body of the email
**Explanation:** The email header typically contains information about the sender, recipient, and subject, while the main body of the email contains the message content.

28. What is the term for a short, automated message that informs the sender you have received their email?
a) Auto-forward
b) Email response
c) Read receipt
d) Out of Office reply
Answer: c) Read receipt
**Explanation:** A read receipt is an automated message that informs the sender that you have received and opened their email.

29. In email, what is the "Drafts" folder used for?

a) To store important emails
b) To hold emails marked as spam
c) To temporarily save unfinished email messages
d) To categorize sent emails
Answer: c) To temporarily save unfinished email

30. What does "CC" stand for in the context of email?
a) Carbon Copy
b) Copy Complete
c) Confidential Communication
d) Closed Caption
Answer: a) Carbon Copy
**Explanation:** In email, "CC" stands for Carbon Copy, and it is used to send a copy of the email to recipients in addition to the main recipient.

31. Which protocol is commonly used for sending and receiving email messages?
a) HTTP (Hypertext Transfer Protocol)
b) FTP (File Transfer Protocol)
c) SMTP (Simple Mail Transfer Protocol)
d) TCP/IP (Transmission Control Protocol/Internet Protocol)
Answer: c) SMTP (Simple Mail Transfer Protocol)
**Explanation:** SMTP is the protocol used for sending email, while other protocols like IMAP and POP3 are used for receiving email.

32. What is the purpose of the "BCC" field in an email?
a) To mark an email as urgent
b) To specify the email's subject
c) To hide the email addresses of recipients from each other
d) To include an attachment
Answer: c) To hide the email addresses of recipients from each other
**Explanation:** "BCC" (Blind Carbon Copy) is used to send copies of the email to recipients without revealing their email addresses to each other.

34. Which of the following is an example of an email client software?
a) Google Search
b) Microsoft Word
c) Microsoft Outlook
d) Mozilla Firefox
Answer: c) Microsoft Outlook
**Explanation:** Microsoft Outlook is an example of email client software used for sending and receiving emails.

35. What does "SPAM" refer to in email terminology?
a) Unwanted or unsolicited email
b) The subject line of an email
c) Secure Personal Authentication Mechanism
d) A type of email attachment
Answer: a) Unwanted or unsolicited email
**Explanation:** "SPAM" refers to unwanted or unsolicited email messages, often sent for advertising or phishing purposes.

36. Which part of an email message typically contains the sender's name, email address, and date?
a) Subject
b) Signature
c) Body
d) Header
Answer: d) Header
**Explanation:** The header of an email message contains information about the sender, recipient, date, and more.

37. When you reply to an email, what does "RE:" in the subject line indicate?
a) Request
b) Reminder
c) Reply
d) Reference
Answer: c) Reply
**Explanation:** "RE:" in the subject line indicates that the email is a reply to a previous message.

38. Which email protocol allows you to access your email from multiple devices and keeps emails stored on the server?
a) HTTP
b) IMAP (Internet Message Access Protocol)
c) SMTP
d) POP3 (Post Office Protocol version 3)
Answer: b) IMAP (Internet Message Access Protocol)
**Explanation:** IMAP is an email protocol that allows you to access emails from multiple devices and keeps them synchronized on the email server.

39. What is a common purpose of an email filter or spam filter?
a) To send automatic replies to incoming emails
b) To organize emails into folders
c) To block unwanted or suspicious emails
d) To encrypt email messages
Answer: c) To block unwanted or suspicious emails
**Explanation:** Email filters or spam filters are used to block and filter out unwanted or suspicious emails.

40. What is the maximum size limit for an email attachment in most email services?
a) 5 MB (Megabytes)
b) 10 GB (Gigabytes)
c) 1 TB (Terabyte)
d) 100 KB (Kilobytes)
Answer: a) 5 MB (Megabytes)
**Explanation:** Most email services have a size limit for email attachments, which is typically around 5 MB.

I hope these questions and explanations help you understand the topic of email. If you have more specific questions or need further information, please feel free to ask.

# ENGLISH NOTES

## VOCABULARY

The following list of synonyms and antonyms has been derived from the past papers as well as vocabulary similar to the questions asked before for extra help in preparation. Most of these have been recurring throughout the previously held exams and the chances of repetition will allow candidates to prepare well. An added variety of synonyms and antonyms have been added for further help of candidates.

| Word | Synonyms (Similar) | Antonyms (Opposite) |
|---|---|---|
| Abate | moderate, decrease | aggravate, supplement |
| Abject | despicable, servile | commendable, praiseworthy |
| Abjure | forsake, renounce | approve, sanction |
| Abortive | vain, unproductive | effectual productive |
| Absolve | pardon, forgive | compel, accuse |
| Accord | agreement, harmony | disagreement, discord |
| Acrimony | harshness, bitterness | courtesy, benevolence |
| Adamant | stubborn, inflexible | flexible, soft |
| Adherent | follower, disciple | rival, adversary |
| Adjunct | joined, added | separated, subtracted |
| Admonish | counsel, reprove | approve, applaud |
| Adversity | misfortune, calamity | prosperity, fortune |
| Alien | foreigner, outsider | native, resident |
| Allay | pacify, soothe | aggravate, excite |
| Alleviate | abate, relieve | aggravate, enhance |
| Allure | entice, fascinate | repulse, repel |
| Amalgamation | admixture, alloy, amalgam, blend, cocktail, combination | component, constituent, element, ingredient |
| Amplify | enlarge, extend | lessen, contract |
| Antipathy | hostility, aversion | admiration, fascination |
| Annihilate | crush, decimate, demolish, eradicate, exterminate, extinguish, finish off | bear, build, construct, create, fix, aid, approve |
| Apathy | unconcern, indifference | concern, care |
| Arraign | charge, blame | exculpate, pardon |
| Audacity | boldness, arrogance | mildness, cowardice |
| Authentic | genuine, reliable | fictitious, unreal |
| Awkward | clumsy, rough | clever, apt |
| Axiom | maxim, truth | absurdity, blunder |
| Baffle | frustrate, perplex | compose, facilitate |
| Bane | affliction, curse, nemesis, scourge | benefit, blessing, boon, felicity |
| Barbarous | uncivilized, savage | cultured, humane |
| Benevolence | humanity, generosity | malevolence, inhumanity |
| Bewitching | magical, fascinating | repulsive, repugnant |
| Bizarre | absurd, crazy, fanciful, fantastic | realistic, reasonable |
| Bleak | dismal, gloomy | bright pleasant |
| Brittle | delicate, fragile | tough, enduring |
| Bustle | haste, flurry | slowness, quiet |
| Canny | astute, clear-eyed, clear-sighted | unknowing |
| Calamity | adversity, misfortune | happiness, fortune |
| Callous | obdurate, unfeeling | compassionate, tender |
| Calumny | defamation, aspersion | commendation, praise |
| Capable | competent, affable | incompetent, inept |
| Captivate | charm, fascinate | disillusion, offend |
| Captivity | imprisonment, confinement | freedom, liberty |
| Cataclysm | alluvion, bath, cataract, deluge, flood, flood tide, inundation, Niagara, overflow | blessing, boon, good fortune, good luck, happiness miracle wonder success |
| Cavity | depth, depression | elevation, projection |
| Cease | terminate, desist | begin, originate |
| Chaste | virtuous, pure | sullied, lustful |
| Cheeky | bold, brash, saucy, impudent, insolent, nervy, | meek, mousy (or mousey), retiring, shy, timid |
| Chastise | punish, admonish | cheer, encourage |
| Conjecture | guess, shot, supposition, surmise | proof, reality, truth, calculation, certainty, fact, |

| | | measurement |
|---|---|---|
| Compassion | kindness, sympathy | cruelty, barbarity |
| Comprise | include, contain | reject, lack |
| Complex | compound, network, structure system | division, separation |
| Concede | yield, permit | deny, reject |
| Concur | approve, agree | differ, disagree |
| Consent | agree, permit | object, disagree |
| Consequence | effect, outcome | origin, start |
| Consolidate | solidify, strengthen | separate, weaken |
| Conspicuous | prominent, obvious | concealed, hidden |
| Convenient | acceptable, advantageous, agreeable, available, beneficial, comfortable, conducive | bad, disadvantageous, disagreeable, harmful, hindering, hurtful |
| Contempt | scorn, disregard | regard, praise |
| Contradict | deny, oppose | approve, confirm |
| Contrary | dissimilar, conflicting | similar, alike |
| Crumble | atrophy, decay, decline, degenerate, descend | ameliorate, improve, meliorate |
| Cynical | misanthropic, pessimistic | un-cynical |
| Dainty | elegant, delicate | clumsy, coarse |
| Dangle | droop, flap, hang, sling, sway, swing | disenchant, disgust, dissuade, repulse, turn off |
| Decay | collapse, decompose | flourish, progress |
| Deceit | deception, artifice | veracity, sincerity |
| Decipher | interpret, reveal | misinterpret, distort |
| Dedicate | devote, consecrate | refuse, negate |
| Defer | prolong, suspend | accelerate, expedite |
| Defile | contaminate, pollute | purify, sanctity |
| Defray | spend, pay | disclaim, repudiate |
| Deficit | crunch, dearth, deficiency, drought (also drouth), failure | abundance, adequacy, amplitude, opulence, |
| Deliberate | cautious, intentional | rash, sudden |
| Delicious | palatable, tasteful | distasteful, unsavoury |
| Demolish | ruin, devastate | repair, construct |
| Deprive | despoil, divest | restore, renew |
| Deride | mock, taunt | inspire, encourage |

| | | worthy, decent |
|---|---|---|
| Despicable | worthless, shameless | |
| Devilish | baroque, excessive, exorbitant, extravagant, extreme, fancy, immoderate, inordinate | middling, moderate, modest, reasonable, temperate |
| Disdain | detest, despise | approve, praise |
| Disgorged | regurgitate, discharge, retch, spew | bottle (up), contain, restrain, shut |
| Disparate | different, dissimilar, distant, distinct, distinctive | alike, identical, indistinguishable, kin |
| Eccentric | strange, abnormal | natural, conventional |
| Ecstasy | delight, exultation | despair, calamity, depression |
| Efface | destroy, obliterate | retain, maintain |
| Elevate | dignify, heighten | deprecate, denounce |
| Eliminate | expel, oust | restore, accept |
| Eloquence | expression, fluency | halting, stammering |
| Emancipate | discharge, disenthrall , enfranchise, enlarge, | bind, confine, enchain, fetter, restrain |
| Encumbrance | hindrance, obstacle | incentive, stimulant |
| Endeavour | undertake, aspire | cease, quit |
| Enormous | colossal, mammoth | diminutive, negligible |
| Epitome | precise, example | increment, expansion |
| Equivocal | uncertain, hazy | obvious, lucid |
| Eradicate | destroy, exterminate | secure, plant |
| Esteem | respect, regard | ridicule, spurn |
| Eternal | perpetual, endless | temporary, momentary |
| Evade | avoid, elude | acknowledge, confront |
| Evident | obvious, apparent | obscure, concealed |
| Expedient | advantageous, desirable, feasible | |
| judicious, opportune | disadvantageous, impossible, unfeasible, unreasonable, unwise | |
| Exemplify | demonstrate, illustrate, instance | demonstrate, illustrate, instance |
| Fabricate | construct, produce | destroy, dismantle |
| Fallacy | delusion, mistake | veracity, truth |
| Falter | stumble, demur | persist, endure |
| Fanatical | narrow-minded, | liberal, tolerant |

| | biased | |
|---|---|---|
| Fantastic | fanciful, uncommon | ordinary, normal |
| Feeble | weak, frail | strong, robust |
| Ferocious | cruel, fierce | gentle, sympathetic |
| Feud | strife, quarrel | fraternity, harmony |
| Fleeting | transient, temporary | enduring, eternal |
| Flimsy | trifling, transparent | firm, tenacious |
| Fluctuate | deflect, vacillate | stabilize, resolve |
| Forsake | desert, renounce | hold maintain |
| Fragile | weak, infirm | enduring, tough |
| Frantic | violent, agitated | subdued, gentle |
| Frivolous | petty, worthless | solemn, significant |
| Frugality | economy, providence | lavishness, extravagance |
| Gloom | obscurity, darkness | delight, mirth |
| Glut | stuff, satiate | starve, abstain |
| Glid | bowl, breeze, brush, coast | flounder, struggle |
| Gorgeous | magnificent, dazzling | dull, unpretentious |
| Gracious | courteous, beneficent | rude, unforgiving |
| Grisly | disgusting, atrocious | pleasing, attractive |
| Grudge | hatred, aversion | benevolence, affection |
| Guile | cunning, deceit | honesty, frankness |
| Hallucination | illusion, phantom, aberration, apparition, fantasy | reality, experience, fact, truth |
| Hamper | retard, prevent | promote, facilitate |
| Haphazard | random, unsorted | considered, arranged |
| Hapless | unfortunate, ill-fated | fortunate, lucky |
| Hanged | attach, bend, drape, drift, flap, float | abandon, detach, disregard, forget |
| Harass | irritate, molest | assist, comfort |
| Haughty | arrogant, pompous | humble, submissive |
| Hazard | Peril, danger | conviction, security |
| Heretic | non-conformist, secularist | conformable, religious |
| Hideous | frightful, shocking | attractive, alluring |
| Hypocrisy | deception, affectation | sincerity, honesty |
| Hypothetical | debatable, imaginary, problematic, speculative, theoretical, vague | certain, definite, factual, real sure |
| Icon | figure, idol, picture, portrait, symbol | nobody, non-celebrity |
| Indigenous | aboriginal, autochthonous, born | nonnative |
| Infinitesimal | atomic, bitsy, bitty, itty-bitty (or itsy-bitsy), little bitty, microscopic | astronomical (also astronomic), colossal, cosmic (also cosmical), elephantine, enormous, giant |
| Investigate | consider, examine, explore, inspect interrogate | answer, forget, ignore, neglect |
| Immaculate | unsullied, spotless | defiled, tarnished |
| Immense | huge, enormous | puny, insignificant |
| Immerse | submerge, involve | emerge, uncover |
| Imminent | impending, brewing | distant, receding |
| Immunity | prerogative, privilege | blame, censure |
| Impair | diminish, deteriorate | restore, revive |
| Impartial | just, unbiased | prejudiced, biased |
| Impediment | hurdle, obstruction | assistance, concurrence |
| Impious | irreligious, unholy | pious, devout |
| Impute | attribute, ascribe | exculpate, support |
| Inane | empty, meaningless, pointless, senseless | meaningful, significant |
| Inclination | disposition, affection | disinclination, indifference |
| Incompetent | inefficient, unskilled | dexterous, skilled |
| Incongruous | inappropriate, absurd | compatible, harmonious |
| Inevitable | unavoidable, ascertained | unlikely, doubtful |
| Infringe | violate, encroach | comply, concur |
| Ingenuous | undisguised, naïve | wily, crafty |
| Insinuate | allude, hint | conceal, camouflage |
| Insipid | tasteless, vapid | delicious, luscious |
| Insolvent | indigent, destitute | wealthy, solvent |
| Instil | inculcate, inject | eradicate, extract |
| Intricate | tangled,, complicated | regulated, orderly |
| Intrigue | scheme, conspiracy | candour, sincerity |
| Intrinsic | genuine,, fundamental | extraneous, incidental |
| Invective | accusation, censure | approval, acclamation |
| Invincible | unconquerable, impregnable | effeminate, languid |
| Inquisitive | analytical, nosy, big-eyed, challenging, forward, impertinent, | incurious, indifferent, unconcerned, uninterested |

| | | |
|---|---|---|
| | inquiring | |
| Irrepressible | irresistible, unconfined | composed, hesitant |
| Jaded | tired, exhausted | renewed, recreated |
| Jejune | dull, boring | interesting, exciting |
| Jovial | frolicsome, cheerful | solemn, morose |
| Jubilant | rejoicing, triumphant | melancholy, depressing |
| Judicious | thoughtful, prudent | irrational, foolish |
| Just | honest, impartial | unequal, unfair |
| Justify | defend, exculpate | impute, arraign |
| Juvenile | young, tender | dotage, antiquated |
| Keen | sharp, poignant | vapid, insipid |
| Kindred | relation, species | unrelated, dissimilar |
| Knave | dishonest, scoundrel | paragon, innocent |
| Knell | death knell, last, blow | reconstruction, rediscovery |
| Knotty | Complicated, difficult | simple, manageable |
| Lavish | abundant, excessive | scarce, deficient |
| Lax | slack, careless | firm, reliable |
| Lenient | compassionate, merciful | cruel, severe |
| Liable | accountable, bound | unaccountable, apt to |
| Liberal | magnanimous, generous | stingy, malicious |
| Linger | loiter, prolong | hasten, quicken |
| Listless | indifferent, inattentive | brisk, attentive |
| Lucid | sound, rational | obscure, hidden |
| Lunacy | delusion, insanity | normalcy, sanity |
| Lure | attract, entice | repel, dissuade |
| Lurid | exaggerated, ghastly, gory, grim, grisly, horrifying, macabre, obscene | clean, delightful, dull, mild, moral, nice, pleasant, pleasing, upright, humble, modest |
| Luscious | palatable,delicious | unsavoury, tart |
| Luxuriant | profuse, abundant | scanty, meagre |
| Malice | animosity, animus, antipathy, bitterness, enmity, grudge, hatred | friendliness, friendship, good will, happiness, kindness |
| Melodious | melodic, musical, tuneful | discordant, grating, inharmonious |
| Minute | diminutive, miniature | large, colossal |
| Miraculous | marvelous, extraordinary | ordinary, trivial |
| Mitigate | alleviate, relieve | augment, enhance |
| Modest | humble, courteous | arrogant, pompous |

| | | |
|---|---|---|
| Molest | harass, tease | console, soothe |
| Mollify | appease, assuage | irritate, infuriate |
| Momentous | notable, eventful | trivial, insignificant |
| Monotonous | irksome, tedious | varied, pleasant |
| Munificent | liberal, hospitable | frugal, penurious |
| Murky | dusky, dreary | bright shining |
| Mutinous | recalcitrant, Insurgent | submissive, faithful |
| Mutual | joint, identical | separate, distinct |
| Myopic | nearsighted, shortsighted, biased, half-sighted | |
| Negligent | inattentive, careless | vigilant, careful |
| Niggardly | miser, covetous | generous, profuse |
| Nimble | prompt, brisk | sluggish, languid |
| Nonchalant | indifferent, negligent | attentive, considerate |
| Notion | approach, assumption, conception, impression, opinion, perception | being, concrete, reality, ignorance, misunderstanding, stupidity |
| Novice | tyro, beginner | veteran, ingenious |
| Noxious | baneful, injurious | healing, profitable |
| Nullify | cancel, annual | confirm, uphold |
| Numerous | profuse, various | scarce, deficient |
| Obstruct | impede, prevent | hasten, encourage |
| Obvious | evident, apparent | obscure, ambiguous |
| Occult | latent, ambiguous | intelligible, transparent |
| Odious | malevolent, obnoxious | engaging, fascinating |
| Offensive | abhorrent, arrogant | docile, compliant |
| Offspring | descendant, sibling | ancestor, forefather |
| Opaque | obscure, shady | transparent, bright |
| Oracular | cryptic, vague | lucid, distinct |
| Ordain | order, impose | revoke, abolish |
| Ornamental | decorative, adorned | unseemly, plain |
| Outbreak | eruption, insurrection | compliance, subjection |
| Outrage | offence, maltreatment | praise, favour |
| Overwhelm | triumph, subjugate | flounder, falter |
| Pamper | flatter, indulge | deny, disparage |
| Paramount | foremost, eminent | trivial, inferior |
| Peerless | matchless, unrivalled | mediocre, commonplace |
| Peevish | perverse, sullen | suave, amiable |
| Pertness | flippancy, impudence | modesty, diffidence |
| Perverse | petulant, obstinate | complacent, docile |
| Placid | tranquil, calm | turbulent, hostile |

| | | |
|---|---|---|
| Pompous | haughty, arrogant | unpretentious, humble |
| Proliferate | accelerate, accumulate, appreciate, balloon, | contract, decrease, diminish, dwindle, lessen |
| Precarious | doubtful, insecure | assured, undeniable |
| Predicament | plight, dilemma | resolution, confidence |
| Premature | precocious, untimely | belated, opportune |
| Prodigious | vast, enormous | unimpressive, diminutive |
| Prodigy | miracle, marvel | normal, average |
| Profligate | dissolute, degenerate | virtuous, upright |
| Profuse | lavish, abundant | scarce, scantly |
| Proscribe | prohibit, exclude | solicit, include |
| Protract | prolong, delay | abbreviate, curtail |
| Provoke | inflame, incite | pacify, comfort |
| Prudent | cautious, discreet | impetuous, unwise |
| Quack | impostor, deceiver | upright, unfeigned |
| Quaint | queer, strange | familiar, usual |
| Quarantine | seclude, screen | befriend, socialize |
| Quell | subdue, reduce | exacerbate, agitate |
| Questionable | dubious, disputable | reliable, authentic |
| Quibble | equivocate, prevaricate | unfeign, plain |
| Radiant | aglow, beaming, bright, glowing, sunny | dim, dull, lackluster, unbright, un-brilliant |
| Ratify | consent, approve | deny, dissent |
| Ravage | destroy, ruin | reconstruct, renovate |
| Rebate | abatement, deduction, discount reduction | increase, rise, escalation |
| Redeem | recover, liberate | conserve, lose |
| Remnant | residue, piece | entire, whole |
| Remonstrate | censure, protest | agree, loud |
| Remorse | regret, penitence | ruthlessness, obduracy |
| Remote | inaccessible, farther | adjoining, adjacent |
| Rescind | annul, abrogate | delegate, permit |
| Resentment | displeasure, wrath | content, cheer |
| Retract | recant, withdraw | confirm, assert |
| Reverence | respect, esteem | disrespect, affront |
| Rout | vanquish, overthrow | succumb, withdraw |
| Rustic | rural uncivilised | cultured, refined |
| Ruthless | remorseless, inhumane | compassionate, lenient |
| Sarcastic | ironical, derisive | courteous, gracious |
| Saucy | impudent, insolent | modest, humble |
| Scanty | scarce, insufficient | lavish, multitude |
| Shabby | miserable, impoverished | prosperous, thriving |
| Shrewd | cunning, crafty | simple, imbecile |
| Slander | defame, malign | applaud, approve |
| Smudge | befoul, begrime, bemire, besmirch, blacken | clean, cleanse |
| Sneer | mock, scorn | flatter, praise |
| Solicit | entreat, implore | protest, oppose |
| Sporadic | intermittent, scattered | incessant, frequent |
| Squalid | dirty, filthy | tidy, attractive |
| Stain | blemish, tarnish | honour, purify |
| Stupor | lethargy, unconsciousness | sensibility, consciousness |
| Subsequent | consequent, following | Preceding, Previous |
| Substantial | considerable, solid | tenuous, fragile |
| Subvert | demolish, sabotage | generate, organise |
| Superficial | partial, shallow | profound, discerning |
| Sycophant | parasite, flatterer | devoted, loyal |
| Taboo | prohibit, ban | permit, consent |
| Taciturn | reserved, silent | talkative, extrovert |
| Tedious | wearisome, irksome | exhilarating, lively |
| Temperate | cool, moderate | boisterous, violent |
| Throng | assembly, crowd | dispersion, sparsity |
| Timid | diffident, coward | bold, intrepid |
| Tranquil | peaceful, composed | violent, furious |
| Transient | temporal, transitory | lasting, enduring |
| Trenchant | assertive, forceful | feeble, ambiguous |
| Trivial | trifling, insignificant | significant veteran |
| Tumultuous | violent, riotous | peaceful, harmonious |
| Tyro | beginner, learner | proficient, veteran |
| Umbrage | resentment, bitterness | sympathy, goodwill |
| Uncouth | awkward, ungraceful | elegant, graceful |
| Usurp | seize, wrest | restore, compensate |
| Utterly | completely, entirely | deficiently, incompletely |
| Vagrant | wanderer, roaming | steady, settled |
| Valid | genuine, authentic | fallacious, deceptive |
| Valour | bravery, prowess | fear, cowardice |
| Vanity | conceit, pretension | modesty, humility |
| Venerable | esteemed, honoured | unworthy, immature |
| Venom | poison, malevolence | antidote, benevolent |

| | | |
|---|---|---|
| Veteran | ingenious, experienced | novice, tyro |
| Vicious | corrupt, obnoxious | noble, virtuous |
| Vigilant | cautious, alert | careless, negligent |
| Volatile | light, changing | heavy, ponderous |
| Vouch | confirm, consent | repudiate, prohibit |
| Vulgar | inelegant, offensive | elegant, civil |
| Waive | relinquish, remove | impose, clamp |
| Wan | pale, faded | bright, healthy |
| Wane | decline, dwindle | ameliorate, rise |
| Wary | cautious, circumspect | heedless, negligent |

| | | |
|---|---|---|
| Wed | marry, combine | divorce, separate |
| Wicked | vicious, immoral | virtuous, noble |
| Wield | use, employ | forgo, avoid |
| Wilt | wither, perish | revive, bloom |
| Yearn | languish, crave | content, satisfy |
| Yell | shout, shriek | whisper, muted |
| Yield | surrender, abdicate | resist, protest |
| Yoke | connect, harness | liberate, release |
| Zeal | eagerness, fervour | apathy, lethargy |
| Zenith | summit, apex | nadir, base |
| Zest | delight, enthusiasm | disgust, passive |
| Zig-zag | oblique, wayward | straight, unbent |

# ANTONYMS

**From the given options choose a word most opposite in meaning to the one in question.**

1) Mangle
a) Disfigure b) damage
c) Mend d) wreck
**Correct answer:** c
**Explanation:** Mangle means to injure badly or alter in such as form as unrecognizable. Mend means to alter for better; heal or cure.

2) Exalt
a) Condemn b) glorify
c) Worship d) praise
**Correct answer:** a
**Explanation:** Exalt means to heighten or intensify, to praise or honor. Condemn means to express strong disapproval or declare or judge unfit for something.

3) Persecute
a) Harass b) comfort
c) torture d) afflict
**Correct answer:** b
**Explanation:** Persecute means to cause to suffer, to annoy. Comfort is an act of consoling, to relive from affliction/pain.

4) Redemptive
a) Rescue b) cleansing
c) danger d) heaven
**Correct answer:** c
**Explanation:** Redemptive means to save someone from evil or danger. Danger means possibility of some threat or evil.

5) Wallow
a) Rejoice b) roll
c) delight d) dislike
**Correct answer:** d
**Explanation:** Wallow means to engage oneself entirely in a task with pleasure. Dislike means to feel aversion towards something.

6) Censure
a) Rebuke b) criticize
c) praise d) condemn
**Correct answer:** c
**Explanation:** Censure means harsh criticism or to condemn someone or something. Praise means to express approval or to value.

7) Blurt
a) Hold one's tongue b) utter
c) exclaim d) give away
**Correct answer:** a
**Explanation:** Blurt means to utter impulsively, to speak out without thinking. Hold one's tongue means to stop talking, speak carefully.

8) Preliminary
a) Beginning b) concluding
c) foremost d) primal
**Correct answer:** b
**Explanation:** preliminary means to something that serves as a preceding event or introduces what follows. Concluding means an event occurring at the end.

9) Solitude
a) Isolation b) Secluded
c) Loneliness d) association
**Correct answer:** d
**Explanation:** Solitude means a state of being alone or withdrawn from society. Association means a group of people organized for a common goal.

10) Oblivious
a) Cautious b) unaware
c) heedless d) insensible
**Correct answer:** a
**Explanation:** Oblivious means lacking conscious awareness of something. Cautious means showing careful forethought.

11) Gaiety
a) Cheer b) sadness
c) glee d) festivity
**Correct answer:** b
**Explanation:** Gaiety is a state of being cheerful or light-hearted. Sadness is the emotion experienced when not in a state of well-being.

12) Pedestrian

a) Walker b) humdrum
c) monotonous d) motorist
**Correct answer:** d
**Explanation:** Pedestrian is a person who travels by foot. Motorist is a person who drives an automobile.

13) Amiable
a) Friendly b) sympathetic
c) irritable d) charming
**Correct answer:** c
**Explanation:** Amiable means possessing sweetness, diffusing warmth or friendliness. Irritable means sensitive to stimulus; easily annoyed.

14) Peculiar
a) Strange b) unusual
c) ordinary d) rare
**Correct answer:** c
**Explanation:** peculiar means deviating from the usual or expected. Ordinary means not special in any way especially in quality or degree.

15) Sleek
a) Glossy b) polished
c) lustrous d) coarse
**Correct answer:** d
**Explanation:** sleek is something having a smooth, beaming surface. Coarse are textures that are rough to touch.

16) Dandy
a) Quality b) splendid
c) substandard d) nifty
**Correct answer:** c
**Explanation:** Dandy means a person who is much concerned about his appearance. Substandard means a person falling short of some standards/prescribed norms.

17) Sob
a) Cry b) giggle
c) creep d) moan
**Correct answer:** b
**Explanation:** sob means to weep convulsively. Giggle means to laugh nervously.

18) Vicious
a) Benevolent b) sinful
c) ferocious d) nasty
**Correct answer:** a
**Explanation:** vicious means able or disposed to inflict pain or suffering. Benevolent means intending or showing kindness.

19) Unctuous
a) Flattering b) sleek
c) bland d) blunt
**Correct answer:** d
**Explanation:** Unctuous means excessively charming in manner or speech. Blunt means someone characterized by directness in manner or speech, without being subtle.

20) Fidget
a) Trifle b) twitch
c) relax d) jiggle
**Correct answer:** c
**Explanation:** fidget means uneasiness or restlessness. Relax means to become less tighten.

21) Ominous
a) Threatening b) propitious
c) gloomy d) scary
**Correct answer:** b
**Explanation:** ominous means threatening or tragic developments. Propitious means presenting favorable circumstances, kind, gracious, helpful etc.

22) Hunch
a) Prediction b) suspicion
c) forecast d) proof
**Correct answer:** d
**Explanation:** Hunch means an expression that something might be the case. Proof is actual evidence to establish the truth of something.

23) Gad
a) Roam b) drift
c) stay put d) stray
**Correct answer:** c
**Explanation:** Gad means to walk about or to roam about. Wander aimlessly. Stay put means to remain at a place without moving.

24) Sordid
a) Reputable b) filthy
c) shabby d) nasty
**Correct answer:** a
**Explanation:** Sordid means morally degraded, unethical or dishonest. Reputable means having or worthy of something; praise worthy.

25) Slumber
a) Nap b) peace
c) nap d) wakefulness
**Correct answer:** d
**Explanation:** slumber means a periodic state in which the consciousness of the world is suspended. Wakefulness is a periodic state in which one is conscious of the world.

26) Diligent
a) Tireless b) inactive
c) persistent d) energetic
**Correct answer:** b
**Explanation:** Diligent is being characterized by care in carrying out tasks. Inactive is someone who is ignorant and not active physically or mentally.

27) Wick
a) Match b) dissipate
c) spotlessness d) sate
**Correct answer:** c
**Explanation:** Wick is a loosely woven cord that draws fuel by capillary action. Spotlessness is a state of being absolutely clean; a tightly woven surface.

28) Undulant
a) Wavy b) crinkle
c) curvy d) straight
**Correct answer:** d

**Explanation:** Undulant is a surface having a rising or falling appearance/ wavy appearance. Straight is a surface without deviation.

29) Tread
a) Crawl b) walk
c) pace d) footstep
**Correct answer:** a
**Explanation:** Tread is a step in walking or running. Crawl is slow locomotion on hands and knees/ dragging the body.

30) Visage
a) Face b) look
c) features d) elude
**Correct answer:** d
**Explanation:** Visage is an expression conveyed by a person's face. Elude means escape either physically or mentally, escape understanding by.

31) Pedestal
a) Support b) ceiling
c) foundation d) pillar
**Correct answer:** b
**Explanation:** pedestal means an architectural support or base. Ceiling is the overhead surface of a covered space.

32) Colossal
a) Minute b) immense
c) huge d) tremendous
**Correct answer:** a
**Explanation:** colossal means so great in size and extent. Minute means infinitely small.

33) Fissure
a) Tear b) gap
c) closing d) cleavage
**Correct answer:** c
**Explanation:** Fissure is a narrow opening made by parting of any substance. Closing is the act of closing something/ to close a substance.

34) Concord
a) Harmony b) violence
c) peace d) unity
**Correct answer:** b
**Explanation:** concord means to agree, to act together. Violence is to injure, an act of aggression.

35) Woeful
a) Afflicted b) harmed
c) injured d) joyous
**Correct answer:** d
**Explanation:** woeful means affected by or full of grief. Joyous means full of or characterized by joy.

36) Aghast
a) Carefree b) brave
c) astonished d) stunned
**Correct answer:** a
**Explanation:** Aghast means terrified, struck with fear. Carefree means free of trouble and worry.

37) Shriek
a) Scream b) howl
c) holler d) whisper
**Correct answer:** d
**Explanation:** shriek is to utter a shrill cry/ piercing cry. Whisper is to speak softly, in a low voice.

38) Cascade
a) Drizzle b) rush
c) spout d) squirt
**Correct answer:** a
**Explanation:** cascade is a sudden downpour. To rush down in great quantity. Drizzle means to shed in drops/minute particles.

39) Sojourn
a) Stopover b) vacation
c) break d) reside
**Correct answer:** d
**Explanation:** sojourn is a temporary stay. Stay to spend a short length of time. Reside means to make one's home in a particular place.

40) Rampart
a) Barrier b) fence
c) jeopardy d) embankment
**Correct answer:** c
**Explanation:** Rampart is an embankment built around a space for defensive purposes. Jeopardy is a source of danger, a possibility of incurring loss.

41) Niche
a) Solid b) hole
c) hollow d) corner
**Correct answer:** a
**Explanation:** Niche is a small concavity. A substance having holes inside. Solid is something of entirely one substance with no holes inside.

42) Epilogue:
a) Conclusion b) preface
c) ending d) termination
**Correct answer:** b
**Explanation:** Epilogue is the closing part of a speech/ discourse. Preface is a short introductory essay at the start of a book/ discourse.

43) Pretentious
a) Humble b) arrogant
c) inflated d) proud
**Correct answer:** a
**Explanation:** pretentious is someone making claims to be important or distinct. Humble means claiming little for one self. Someone who's not boastful of himself or his abilities.

44) Placid
a) Serene b) calm
c) violent d) peaceful
**Correct answer:** c
**Explanation:** placid is someone who is not easily irritable, peaceful, pleased. Violent is someone with or marked by great force or emotional intensity.

45) Relish
a) Enjoy b) abhor
c) savor d) delight
**Correct answer:** b
**Explanation:** relish means to take pleasure in, get enjoyed from. Abhor means to hate or strongly dislike something or someone.

46) Reprehensible
a) Shameful b) obnoxious
c) sinful d) creditable

**Correct answer:** d
**Explanation:** Reprehensible means someone deserving severe rebuke/ scolded. Creditable means someone who deserves praise, who is worthy of belief and credit.

47) Glimpse:
a) Glance b) sight
c) stare d) spy
**Correct answer:** c
**Explanation:** glance is a quick look while stare is a fixed look with wide eyes for a notable amount of time.

48) Trivial
a) Conventional b) significant
c) slight d) unimportant
**Correct answer:** b
**Explanation:** Trivial means something of small or no importance. Significant is something important in meaning or value.

49) Mock
a) Ridicule b) taunt
c) tease d) flatter
**Correct answer:** d
**Explanation:** Mock means to treat with contempt. The act of ridicule. Flatter means to praise somewhat dishonestly or to favor bias.

50) Triumphant
a) Pleased b) depressed
c) victorious d) joyous
**Correct answer:** b
**Explanation:** triumphant means to be joyful or proud especially because of success. Depressed means to be filled with melancholy. To feel low and unhappy than usual.

# SYNONYMS

1) Abate means:
a) Intensify b) revive
c) escalate d) diminish
**Correct answer:** d
**Explanation:** Abate means to decrease or lessen so diminish is the correct option which means the same.

2) Aboriginal means:
a) Indigenous b) emigrant
c) uncanny d) foreign
**Correct answer:** a
**Explanation:** Aboriginal means being the first of its kind in a region. Indigenous is the correct answer which means native or primitive.

3) Abridge means:
a) Extend b) enlarge
c) dilate d) condense
**Correct answer:** d
**Explanation:** Abridge means to lessen or shorten so Condense is the right answer which means to compress or make precise.

4) Bane means:
a) Disaster b) comfort
c) felicity d) blessing
**Correct answer:** a
**Explanation:** Bane means cause of ruin, misery. Disaster means a state of extreme misfortune or misery.

5) Barren means:
a) Fertile b) fruitful
c) verdant d) infertile
**Correct answer:** d
**Explanation:** Barren means unproductive and desolate. Infertile is the correct option which means the same as barren.

6) Caliber means:
a) Destitution b) inadequacy
c) quality d) scarcity
**Correct answer:** c
**Explanation:** Caliber means a degree of worth or excellence. Quality means the same.

7) Capricious means:
a) Fickle b) predictable
c) uniform d) invariable
**Correct answer:** a
**Explanation:** capricious means unpredictable. Fickle means the same.

8) Abhorrent means:
a) Agreeable b) loathsome
c) savory d) pleasing
**Correct answer:** b
**Explanation:** Abhorrent means something that is offensive. Loathsome means a highly offensive thing. Both have the same meanings.

9) Repressed means:
a) Stifled b) confessed
c) declared d) emitted
**Correct answer:** a
**Explanation:** Repressed means suppression of impulses or emotions. Stifle means to restrain oneself from acting on emotions.

10) Monetary means:
a) Non-financial b) fiscal
c) fleck d) whiff
**Correct answer:** b
**Explanation:** Monetary and fiscal both mean involving financial matters.

11) Intrigue means:
a) Dismiss b) monotone
c) fascinate d) neglect
**Correct answer:** c
**Explanation:** Intrigue and fascinate both means cause to be interested or curious.

12) Impulsively means:
a) Deliberately b) cautiously
c) consciously d) rashly
**Correct answer:** d
**Explanation:** Impulsively and rashly both means doing something in a foolhardy, incautious manner.

13) Scoff means:
a) Praise b) agree
c) taunt d) accept

**Correct answer:** c
**Explanation:** Scoff and taunt both means to harass with continuous criticism or shoeing contemptuous disregard.

14) Incredulous means:
a) believable b) skeptical
c) convinced d) naive

**Correct answer:** b
**Explanation:** Incredulous and skeptical both mean not willing to accept something or having doubt about the truth of that thing.

15) Shudder means:
a) Steady b) firm
c) tremble d) invoice

**Correct answer:** c
**Explanation:** Shudder and tremble both means to shake or vibrate involuntary.

16) Vague means:
a) Ambiguous b) define
c) obvious d) specific

**Correct answer:** a
**Explanation:** Vague and ambiguous both means not clearly understood or expressed. Something lacking clarity or distinctness.

17) Contemptuous means:
a) Admiring b) applauding
c) considerate d) scornful

**Correct answer:** d
**Explanation:** Contemptuous and scornful both mean manifesting or expressing ridicule or disdain.

18) Appalled means:
a) Brave b) bold
c) frightened d) adventurous

**Correct answer:** c
**Explanation:** Appalled and frightened both mean to strike with fear, horror etc.

19) Furore means:
a) Please b) rage
c) pleasure d) tameness

**Correct answer:** b
**Explanation:** Furore and rage both means a sudden outburst especially of anger.

20) Sapling means:
a) Seedling b) roots
c) uproot d) adult

**Correct answer:** a
**Explanation:** Sapling and seedling both means a young tree.

21) Brace means:
a) Weaken b) support
c) loosen d) relax

Correct means: b
**Explanation:** Brace and support both means to keep something firm or upright using woods iron etc. or material assistance.

22) Loam means:
a) Soil b) rinse
c) wash d) cleanliness

**Correct answer:** a
**Explanation:** Loam is a kind of rich soil consisting of clay and sand and other organic materials.

23) Offend means:
a) Please b) gratify
c) annoy d) reverence

**Correct answer:** c
**Explanation:** Offend means to annoy, to hurt, to displease etc.

24) Whiff means:
a) Sniff b) fragrance
c) essence d) aroma

**Correct answer:** a
**Explanation:** whiff and sniff both mean to perceive by inhaling through nose.

25) Fleck means :
a) Mass b) spot
c) stack d) mess

**Correct answer:** b
**Explanation:** Fleck and spot both means a small contrary part of something. A small part different from the whole lot.

26) Hollow means:
a) Massive b) peak
c) cavity d) solid

**Correct answer:** c
**Explanation:** Hollow cavities both mean something having an empty space within a solid substance. Something excavated in the interior.

27) Willow means:
a) Oak b) widow
c) animals d) wax

**Correct answer:** a
**Explanation:** Willow is any of the numerous deciduous trees and shrubs of the genus Salix like oak, Cypress, avocado etc.

28) Rattle means:
a) Silence b) harmonious
c) clatter d) hush

**Correct answer:** c
**Explanation:** Rattle and clatter means to make sharp loud continuous sounds.

29) Suede means:
a) Nylon b) shoes
c) dusk d) suite

**Correct answer:** a
**Explanation:** Suede and nylon are forms of synthetic fibers. Suede is a leather with a napped surface.

30) Indignation means:
a) Pleasure b) delight
c) rage d) affinity

**Correct answer:** c
**Explanation:** Indignation and rage both mean feeling of anger.

31) Delirium means:
a) Insanity b) harmony
c) dusk d) dejection

**Correct answer:** a
**Explanation:** Delirium and insanity are both states of mind in which the actions are incoherent, irregular and wild. State of violent mental agitation.

32) Havoc means:
a) Cosmos b) adjustment
c) chaos d) haven
**Correct answer:** c
**Explanation:** Havoc and Chaos both mean wide and general destruction, needless disturbance.

33) Stout means:
a) Sturdy b) thin
c) slender d) sleek
**Correct answer:** a
**Explanation:** Stout and sturdy both mean firm, materially strong, something having rugged physical strength.

34) Profusion means:
a) Scarcity b) plenty
c) paucity d) deprivation
**Correct answer:** b
**Explanation:** profusion and plenty both mean state of abundance; lavish supply.

35) Heifer means:
a) calf b) cow
c) bull d) hen
**Correct answer:** a
**Explanation:** Heifer is a calf; Young cow (that has not yet had a child). Young of domestic cattle.

36) Clench means:
a) Break b) grip
c) kick d) liberate
**Correct answer:** b
**Explanation:** clench means to grip, hold in a tight grasp.

37) Tyrant means:
a) Oppressor b) fair
c) loving d) victim
**Correct answer:** a
**Explanation:** a person who uses power in a cruel way. An absolute ruler. Oppressor, someone who oppresses people and causes harm/danger to them, is the closest synonym.

38) Decree means:
a) Plea b) claim
c) order d) appeal
**Correct answer:** c
**Explanation:** Decree is a legally binding order or command made by a court.

39) Versatile means:
a) Limited b) static
c) variable d) monotonous
**Correct answer:** c
**Explanation:** Versatile and variable both mean changeable or inconstant; competent in many areas and able to turn from one thing to another with ease.

40) pacify means:
a) soothe b) excite
c) enrage d) annoy
**Correct answer:** a
**Explanation:** Pacify and sooth both means to suppress anger, agitation or excitement.

41) Afflict means:
a) Solace b) delight
c) distress d) assist
**Correct answer:** c
**Explanation:** Afflict and distress both mean to cause great trouble and physical or psychological pain.

42) Trifling means:
a) Significant b) trivial
c) pivotal d) tickling
**Correct answer:** b
**Explanation:** Trifling and trivial both mean something that is of very low importance.

43) Feeble mean:
a) Frail b) mighty
c) strong d) sturdy
**Correct answer:** a
**Explanation:** Feeble and fail both mean someone pathetically lacking physical energy, force or effectiveness.

44) Exhort means:
a) Dissuade b) forbid
c) encourage d) dismay
**Correct answer:** c
**Explanation:** Exhort and encourage both, mean to use words such as cheers and shouts to incite good deeds.

45) Prodigious mean:
a) ordinary b) Immense
c) oblivious d) slight
**Correct answer:** b
**Explanation:** Prodigious and immense both mean so great in size and extent.

46) Clamour means:
a) Outcry b) silence
c) mutism d) calmness
**Correct answer:** a
**Explanation:** Clamour and outcry both mean loud and persistent noise from people.

47) Oppressive mean :
a) Tyrannical b) mild
c) submissive d) gentle
**Correct answer:** a
**Explanation:** Oppressive and tyrannical both mean someone marked by unjust severity and arbitrary behavior.

48) Queer means:
a) Regular b) ordinary
c) standard d) peculiar
**Correct answer:** d
**Explanation:** Queer and Peculiar both mean something deviating from the usual or expected. Something extraordinary.

49) Acrid means:
a) Pungent b) pleasant
c) savory d) cordial
**Correct answer:** a
**Explanation:** Acrid and pungent both mean strong and sharp, harsh or bitter.

50) Myriad means:
a) Limited b) little
c) infinite d) enumerable
**Correct answer:** c

**Explanation:** Myriad and infinite mean something too much to be countable. A large indefinite number.

# SENTENCE COMPLETION

1. He lacks quality friends because he treats others with _____ disdain.
   a. Tranquil
   b. Barbaric
   c. Mirthful
   d. Sedating

2. Her formal _____ made her a remarkable person for other colleagues.
   a. Shibboleth
   b. Attire
   c. Locution
   d. Cultism

3. The church was raised to the rank of _____.
   a. Basilica
   b. Lazaret
   c. Abode
   d. Amah

4. The editor _____ the manuscript with his changes.
   a. Dwelled
   b. Ameliorated
   c. Snuggled
   d. Nuzzled

5. Intolerance is a _____ to understanding.
   a. Beeline
   b. Barrier
   c. Corduroy
   d. Transition

6. His quick _____ was a product of good design.
   a. Affection
   b. Affirmation
   c. Adroitness
   d. Delinquency

7. He _____ his way into the room.
   a. Cleared
   b. Attempered
   c. Optimised
   d. Angled

8. All the men's hearts were _____ by her beauty.
   a. Despised
   b. Expatriated
   c. Farthest
   d. Beguiled

9. The two women crooned and _____ at the baby.
   a. Fomented
   b. Blathered
   c. Baffled
   d. Trembled

10. That medicine _____ his heart rate.
    a. Effects
    b. Affects
    c. Perts
    d. Spiritism

11. Our team leader is very well known for his _____.
    a. Beneficence
    b. Interdictions
    c. Apathy
    d. Consternation

12. The _____ science of rhabdomancy requires a dowsing rod.
    a. Douse
    b. Arcane
    c. Remit
    d. Abatement

13. Due to manager's slogan of change at work place, a large part of young labour is a/an_____ supporter of their manager.
    a. Slanted
    b. Vivid
    c. Avid
    d. Blunt

14. Be systematically _____, do something for no other reason than that you would rather not do it.
    a. Felon
    b. Ascetic
    c. Bedlamite
    d. Ironical

15. _____ in Russia killed the president and took reigned the country for 50 years.
    a. Advocators
    b. Sympathisers
    c. Antagonists
    d. Daemons

16. Tim was certified with a/an _____ for bravery.
    a. Apportion
    b. Devolve
    c. Accolade
    d. Deteriorate

17. The Professor's lecture was so _____ that students tended to avoid it.
    a. Risible
    b. Shady
    c. Abstruse
    d. Repugnant

18. At the end of prayers, for the flood victims, Priest made a special _____ to calm the families.
    a. Denotation
    b. Benediction
    c. Proliferation
    d. Obviation

19. The word closest in the meaning of promptly is:
    a. Slowly
    b. Rapidly
    c. Lately
    d. Negligently

20. A carefully _____ poem can be like a dead butterfly pinned to a board.
    a. Analyzed
    b. Chanted
    c. Imperturbable
    d. Dramatize

21. The word opposite in the meaning to splendors is
    a. Dullness
    b. Luster
    c. Grandeur
    d. Magnificence

22. The patient will be _____ after 24 hours of surgery.
    a. Ambulatory
    b. Gimpy
    c. Stultified
    d. Ribbed

23. James has a mysterious _____ with Sam in the office.
    a. Altercation
    b. Jeopardy
    c. Progeny
    d. Affinity

24. The carpenter _____ two pieces of wood.
    a. Articulated
    b. Dribbled
    c. Pelted
    d. Chucked

25. They never _____ in Egypt, even after living many years.
    a. Acclimated
    b. Mortified
    c. Manifested
    d. Postulated

26. He made a/an _____ debut in cricket as a bowler. Everyone hailed his bowling ability.
    a. Untoward
    b. Ominous
    c. Sinewy
    d. Auspicious

27. He accepted the task with_____.
    a. Alacrity
    b. Gravely
    c. Anxiously
    d. Idly

28. We can never trust a/an ____ roof during monsoon.
    a. onerous
    b. rigorous
    c. Arboreal
    d. Galvanised

29. The _____ provided rich material for a definitive biology.
    a. Gobs
    b. Slews
    c. Muckheaps
    d. Archives

30. A / An _____ egg fetid the cake.
    a. Addled
    b. Fermented
    c. Rancid
    d. Acidulous

31. The word opposite in the meaning to quiver is:
    a. Calm
    b. Shudder
    c. Convulsion
    d. Shake

32. She was the final _____ on all matters of fashion.
    a. Advocator
    b. Profounder
    c. Hapless
    d. Arbiter

33. Immigrants often want to _____ quickly to the surroundings
    a. Spurned
    b. Winnow out
    c. Assimilate
    d. Vacillate

34. Benazir's interest _____ into politics, day by day.
    a. Redounds
    b. Impacted
    c. Clupeid
    d. Accrued

35. The word closest in the meaning to quirk is:
    a. Aberration
    b. Normality
    c. Useless
    d. Inability

36. The word closest in the meaning to vulnerable is:
    a. Tested
    b. Pushover
    c. Lashed
    d. Bendability

37. My aunt _____ me all her jewelry.
    a. Addled
    b. Acumen
    c. Bequeathed
    d. Propelled

38. The word opposite in the meaning to contemplate is:
    a. Overlook
    b. Ponder
    c. Convulsion

d. Consider

39. The company tried to project a/an _____ image.
a. Exemplified
b. Umbrageous
c. Panegyrical
d. Altruistic

40. Phrenology was a/an _____ of modern neuroscience.
a. Subsequent
b. Antecedent
c. Occurrent
d. Grapheme

41. In the 19th century any reference to female sexuality was considered vile. Identify the synonym for the underlined word.
a. Aspersion
b. Aberration
c. Abolition
d. Abundance

42. The student looked around the examination room with_____.
a. Apprehension
b. Apprise
c. Inculpation
d. Incrimination

43. Man who tried to attack her, was _____ by her.
a. Doted
b. Imparted
c. Battered
d. Apprehend

44. The Maestro _____ to the request for an encore.
a. Beckoned
b. Acquiesced
c. Spurned
d. Scorned

45. A successful businessman is _____ of the risks.
a. Audacious
b. Agoraphobic
c. Dismay
d. Coerce

46. He discovered the _____ of reading at an early age.
a. Drollery
b. Frivolity
c. Frippery
d. Amenities

# ANSWERS & EXPLANATIONS (SENTENCE COMPLETION)

Question Number: 1
Correct Option: b
**Explanation: - Disdain** mean disrespect or to humiliate someone/something.
- **Tranquil** means placid.
Sample sentence: *I lay near the lake to relax, what a tranquil scene it is.*
- **Mirthful** means laughter, joy.
Sample sentence: *The mirthful poem always cheers me up when I am sad.*
- **Sedate** means cause to be calm.
Sample sentence: *It was difficult to sedate the angry mob because they wanted nothing less than fulfilment of their demands.*
- **Barbaric** means uncivilized.
Sample sentence: *Men battering is a barbaric act.*
Therefore, **barbaric** is an appropriate word to fill in the blank

Question Number: 2
Correct Option: b
**Explanation: - Shibboleth** means slogan, a common saying or a belief related to a particular sect or political group.
Sample sentence: *When he described his narrative, it was evident from his shibboleth that he belonged to the rival organization.*
- **Attire** means clothing of a distinctive style.
Sample sentence: *He always wears a formal attire, irrespective of the occasion.*
- **Locution** means saying, particular form of expression, or, phrase.
Sample sentence: *Salim has adopted the same locution despite having been criticized for his extremist views.*
- **Cultism** means religious zeal.
Sample sentence: *The cult leader saw him as an influential figure.*
Hence, **attire** is an appropriate word to fill in the blank.

Question Number: 3
Correct Option: a
**Explanation: - Basilica** means a roman catholic church accorded certain privileges.
- **Lazaretto** means a hospital for persons with infectious diseases.
- **Abode** means residence.
- **Amah** means a woman hired to suckle a child for someone else.
Therefore, **Basilica** is an appropriate word to fill in the blank.

Question Number: 4
Correct Option: b
**Explanation: - Dwelled** means to reside permanently.
Sample sentence: *She has dwelled in this building for many years.*
- **Ameliorate** means to make better.

Sample sentence: *The government should draft strategies to ameliorate negative impact of pollution on the environment.*
- **Snuggled** means position comfortably.
Sample sentence: *He snuggles with his cat while feeding her.*
- **Nuzzle** mean cozy.
Sample sentence: *I love to nuzzle up in my bed during winters.*
Therefore, **Ameliorated** is the most appropriate word to fill on the blank.

Question Number: 5
Correct Option: b
**Explanation: - Beeline** means the most direct route.
Sample sentence: *One should always choose beeline for success, short cuts create may lead to problems.*
- **Barrier** means obstacle.
Sample sentence: *Feudalism is a barrier to democracy.*
- **Corduroy** means a cut pile fabric with vertical ribs, usually made of cotton.
Sample sentence: *She was wearing a beautiful red corduroy suit.*
- **Transition** means the act of passing from one state to the next.
Sample sentence: *Transition from communist state to capitalist state is a difficult one.*
Barrier is the most appropriate word to fill in the blank.

Question Number: 6
Correct Option: c
**Explanation: - Affection** means fondness.
Sample sentence: *He is very rude towards his children; he does not show his children any affection.*
- **Affirmation** means statement asserting truth of something.
Sample sentence: *Court didn't affirm to what he said as a result of which he was convicted of theft.*
- **Adroitness** means skillful performance.
Sample sentence: *Shakir is an adroit negotiator, I am sure he will crack a deal.*
- **Delinquency** means criminal behaviour.
Sample sentence: *There is an increase in juvenile delinquency in my town.*
Adroitness is the most appropriate word to fill in the blank.

Question Number: 7
Correct Option: d
**Explanation: - Cleared** means rid of objects.
Sample sentence: *Smog cleared away after important steps were taken.*
- **Attempered** means modify the temperature.
Sample sentence: *Neither clothes nor fire would attemper the cold weather.*
- **Optimized** means get the most out of it.
Sample sentence: *My boss wants me to make optimal use of the given resources.*
-**Angled** means move or proceed at an angle.
Sample sentence: *He angled himself for the gym.*
Hence, **angled** is correct answer.

Question Number: 8
Correct Option: d
**Explanation: - Despised** means treated with contempt or to dislike.
Sample sentence: *He despised himself for being lazy*
- **Expatriate** means a person who is voluntarily absent from home or country.
Sample sentence: *There are many Pakistani expatriates in USA.*
- **Farthest** mean to the greatest distance of space or time.
Sample sentence: *This is the farthest distance I can travel in one day.*
- **Beguiled** means attracted.
Sample sentence: *I was beguiled by her beauty.*
Beguiled is most appropriate word to fill in the blank.

Question Number: 9
Correct Option: b
**Explanation: - Blather** means to talk foolishly.
Sample sentence: *The insane man will blather on and on.*
- **Foment** means try to stir up public opinion.
Sample sentence: *The movie was banned because of the fear that it will foment religious tension.*
- **Baffled** means confused.
Sample sentence: The *speaker spoke so fast that the audience got baffled and could not comprehend what he said.*
- **Trembled** means move quickly up and down and sideways.
Sample sentence: *Her voice starts trembling when she heard about the bad health of her mother.*
Croon means to sing in an exaggerated manner. In any sentence, usually conjunction *and* is used to join two words which are almost similar in meaning.
Therefore, option **B** is correct.

Question Number: 10
Correct Option: b
**Explanation: - Effect** means consequence of some previous phenomenon.
Sample sentence: *Heavy rainfall effects the traffic.*
- **Affect** means act physically on.
Sample sentence: *How does your smoking habit affect me?*
-**Perts** means showing lack of respect.
Sample sentence: *She gave a pert reply to the media person.*
- **Spiritism** means practice of spiritualism.
Sample sentence: *He claims to have deep knowledge of spiritism. He claims that he talks with spirits.*
**Affects** is an appropriate word to fill in the blank.

Question Number: 11
Correct Option: a
**Explanation: - Beneficence** means the quality of being helpful.
Sample sentence: *All the team members are motivated because of our leader's beneficence.*
- **Interdiction** means a court order prohibiting a party from doing a certain activity.
Sample sentence: *Court has issued interdiction notice to drug manufacturing company on account of using harmful substances.*

- **Apathy** means an absence of emotion.
Sample sentence: *He is so apathetic that he did not call his father when his father was unwell.*
- **Consternation** means fear resulting from the awareness of danger
Sample sentence: *He started to shiver in consternation.*

Question Number: 12
Correct Option: b
**Explanation: - Douse** means put out
Sample sentence: *The rescue team was able to douse the fire with water.*
- **Arcane** means requiring secret knowledge.
Sample sentence: *The narrative may seem to be arcane to those with little knowledge on the subject*
- **Remit** means send money.
Sample sentence: *My brother sends me remittances every month.*
- **Abatement** means suspension.
Sample sentence: *He created a new tax abatement strategy.*

Question Number: 13
Correct Option: c
**Explanation: - Slanted** means having an oblique direction.
Sample sentence: *The sunlight slanted through the glass roof into the room.*
- **Avid** means excessively desirous.
Sample sentence: *She was eager to serve her community that's why she took an avid interest in community work.*
- **Vivid** means full of life, distinct.
Sample sentence: *The vivid scenery was a sight for sore eyes.*
- **Blunt** means having a broad or rounded end, not sharp.
Sample sentence: *You cannot cut vegetables with a blunt knife.*
Therefore, Avid is the most appropriate word to fill in the blank.

Question Number: 14
Correct Option: b
**Explanation: - Ascetic** means practicing great self-denial.
Sample sentence: *Monks live an ascetic life.*
- **Felon** means criminal.
Sample sentence: *Be careful of Sam, he is a convicted felon.*
- **Bedlamite** means a lunatic.
Sample sentence: *The protesters went almost mad. It was bedlam.*
- **Ironical** means humorously sarcastic.
Sample sentence: *It is ironical that the least educated parliamentarian was made the education minister.*

Question Number: 15
Correct Option: c
**Explanation: - Advocator** mean a person who pleads for a cause.
Sample sentence: *The Civil Society Organization advocated for environmental protection.*
- **Sympathizer** means comforter.
Sample sentence: *Judge granted him bail. The judge was very sympathetic towards him.*
- **Antagonist** means someone who offer opposition.
Sample sentence: *He made a clever strategy to defeat the antagonist.*
- **Daemon** means a supernatural being.
Sample sentence: *Many of Plato's works mention the philosophical concept of Daemon, as opposed to its mythological understanding.*
Hence, **Antagonists** is the appropriate word to fill in the blank.

Question Number: 16
Correct Option: c
**Explanation: - Apportion** means allocate.
Sample sentence: *Apportion the utility bill among all the users.*
- **Devolve** means pass on.
Sample sentence: *The new legislation lead to devolution of power. More authority has been given to local bodies.*
-**Accolade** means a tangible symbol signifying distinction.
Sample sentence: *He received the Oscar award, the highest accolade in the film industry.*
- **Deteriorate** means become worse.
Sample sentence: *You have been using this mobile since the past 5 years. Its condition has deteriorated now.*
**Accolade** is the most appropriate word to fill in the blank.

Question Number: 17
Correct Option: c
**Explanation:** - Abstruse means difficult to understand.
Sample sentence: Many people find it abstruse to understand the complex nature of our economy.
-Risible means laughable.
Sample sentence: His comedy was risible.
- Shady means not as expected.
Sample sentence: This person seems to be shady, he will not be hired by the HR manager.
- Repugnant means offensive to the mind.
Sample sentence: His ideas are repugnant to that of mine but I still like them.

Question Number: 18
Correct Option: b
**Explanation: - Denotation** the act indicating or pointing out by name.
Sample sentence: The word "petrichor" has the denotation "a person who loves nature".
-**Benediction** means the act of praying for divine protection.
Sample sentence: *Clergyman made a special benediction for the victims of terrorist attack.*
-**Proliferation** means growth by the rapid multiplication of parts.
Sample sentence: *Nuclear proliferation is a global challenge.*
- **Obviation** means act of prevention by disposing of it effectively.
Sample sentence: *Manager tried to obviate the risk of product failure.*
Therefore, Benediction is the most appropriate word to fill in the blank.

Question Number: 19

Correct Option: b
**Explanation:** Promptly means without delay.
- Slowly means gradually.
- **Rapidly** means very quickly.
- Lately means not long ago.
- Negligently means carelessly.
Hence rapidly is the correct synonym.

Question Number: 20
Correct Option: a
**Explanation: - Analyzed** means examined carefully and methodically.
Sample sentence: *He asked me to carefully analyze the work and leave no room for mistakes.*
- **Chanted** means sing or repeatedly shout the same words.
Sample sentence: *The protestor chanted anti-government slogans outside the Parliament.*
- **Imperturbable** means unflappable not easily disturbed.
Sample sentence: *She is an imperturbable person who never gets annoyed of anything.*
- **Dramatize** means put into dramatic form.
Sample sentence: *She dramatized the entire incident to prove herself not guilty.*
Analyzed is an appropriate word to fill in the blank.

Question Number: 21
Correct Option: a
**Explanation:** Splendors means grandeur.
- Dullness means lack of interest.
- Luster means soft glow.
- Grandeur means impressiveness of appearance or style.
- Magnificence means the quality of being magnificent.
Hence dullness is the correct antonym.

Question Number: 22
Correct Option: a
**Explanation: - Ambulatory** means able to walk about.
Sample sentence: *He got a fracture in his leg last week but he is ambulatory now.*
- **Gimpy** means disable in leg.
Sample sentence: *The doctor said that the guy with the gimpy leg will be able to walk.*
- **Stultified** means cause to appear foolish.
Sample sentence: *Their lack of seriousness has made the matter stultified.*
- **Ribbed** means unsmooth.
Sample sentence: *Do you prefer a smooth or ribbed shirt?*
**Ambulatory** is an appropriate word to fill in the blank.

Question Number: 23
Correct Option: a
**Explanation: - Altercation** means a loud argument.
Sample sentence: *The seemingly insignificant difference of opinion turned into an altercation between the two.*
- **Jeopardy** means danger of loss or harm.
Sample sentence: *He realized he was in jeopardy when surrounded by the opposition members.*
- **Progeny** means immediate descendants of a person.
Sample sentence: *Many Australians are the progeny of immigrants.*
- **Affinity** means attraction.
Sample sentence: *Azeem likes to watch football. He has a deep affinity with the sports.*
**Altercation** is an appropriate word to fill in the blank.

Question Number: 24
Correct Option: a
**Explanation:** - Articulated (in carpentry) means provide with a joint.
- Dribbled means run or flow slowly.
Sample sentence: The footballer is an expert at dribbling the ball.
- Pelted means bombard.
Sample sentence: Protesters pelted the building with stones.
- Chucked means throw carelessly.
Sample sentence: I chucked the old clothes away.

Question Number: 25
Correct Option: a
**Explanation: - Acclimated** means get used to a certain climate.
Sample sentence: *I could not acclimate to Karachi's weather because I have lived for a long time in hilly areas.*
- **Mortified** means to feel ashamed.
Sample sentence: *He was mortified when he realized that his son broke the window but he scolded his servant for it.*
- **Manifested** means demonstrated.
Sample sentence: *Her painting was a manifestation of art work.*
- **Postulated** means contend/put forward.
Sample sentence: *Einstein postulated the theory of relativity.*

Question Number: 26
Correct Option: d
**Explanation: - Untoward** means indecent.
Sample sentence: *The untoward circumstances forced us to cancel our trip.*
- **Ominous** means indicating evil intent.
Sample sentence: *His ominous gestures were indicating that he will do something evil.*
- **Sinewy** means tough.
Sample sentence: *That athlete had an incredible stamina and he was sinewy.*
- **Auspicious** means favorable circumstances.
Sample sentence: *Your wedding is an auspicious occasion for the entire family as everyone is meeting after 2 years.*
Auspicious is the most appropriate word to fill in the blank.

Question Number: 27
Correct Option: a
**Explanation:** - Alacrity means liveliness & eagerness.
Sample sentence: He is a motivated employee that's why he accepted the new task with alacrity.
- Gravely means to a degree that is a cause for worry/alarm.
Sample sentence: Farmers are gravely concerned for the implementation of the disaster management policy because of floods forecast.

- Anxiously means with anxiety.
Sample sentence: He was told by his friend that he has symptoms of diabetes that's why he was anxiously waiting for his health report.
- Idly mean lazily.
Sample sentence: She never cleans her room, idly sitting in the mess.
Alacrity is an appropriate word to fill in the blank.

Question Number: 28
Correct Option: c
**Explanation: -Onerous** means oppressive.
Sample sentence: *My boss punished me by ascribing me onerous duties.*
- **Rigorous** mean harsh.
Sample sentence: *The rigorous law will lead to human rights violation.*
- **Arboreal** means formed by trees.
Sample sentence: *An arboreal roof is useless during heavy rainfall.*
-**Galvanized** means to stimulate to action.
Sample sentence: *I motivated my team members to galvanize them to take action.*
Hence, **Arboreal** is the correct word to fill in the blank.

Question Number: 29
Correct Option: d
**Explanation: - Gobs** means many.
Sample sentence: *He withdrew cash from ATM and he was carrying great gobs of cash.*
- **Slews** means batch or large quantity.
Sample sentence: *The company printed a slew of pamphlets to distribute in the entire city.*
- **Muck heaps** means a pile of refuse.
Sample sentence: *The muck heaps produced an unbearable odor for all those who passed by.*
- **Archives** means collection of records.
Sample sentence: *I archived all the unwanted messages in my mobile.*
Archive is the most appropriate word to fill in the blank.

Question Number: 30
Correct Option: a
**Explanation: - Addled** means no longer edible.
Sample sentence: *Due to exposure to sunlight, all of these bananas are addled.*
- **Fermented** means cause to undergo fermentation.
Sample sentence: *Milk becomes cheese by fermentation*
- **Rancid** means having a rank smell due to chemical decomposition.
Sample sentence: *Curry goes rancid in heat.*
- **Acidulous** means acidic in nature.
Sample sentence: *He made acidulous remarks on her hard work because he was jealous of her promotion.*

Question Number: 31
Correct Option: a
**Explanation:** Quiver means shake or move involuntarily.
- Calm means steady.
- Shudder means to shiver, usually due to fear.
- Convulsion means a sudden and violent movement of the body.
- Shake means starting to move.
Hence calm is the correct antonym.

Question Number: 32
Correct Option: d

**Explanation: - Advocator** mean a person who pleads for a cause.
Sample sentence: *Mr. Ahmed advocates for minority rights.*
- **Profounder** means felt very strongly.
Sample sentence: *My aunt's death had a profound effect on her children.*
- **Hapless** means miserable.
Sample sentence: *They were hapless about their future after the death of their father.*
- **Arbiter** means someone with the power to settle matters at will.
Sample sentence: *She is an arbiter of fashion as whatever she says becomes a standard in the fashion industry.*

Question Number: 33
Correct Option: c
**Explanation: - Assimilate** means become similar to one's environment.
Sample sentence: *Cultural assimilation is very important to co-exist in a pluralistic society.*
- **Spurned** means rejected.
Sample sentence: *Ali spurned Adil's invitation because Ali hates Adil.*
- **Winnow out** means eliminate.
Sample sentence: *Despite the hard work he was winnowed out during the selection stage.*
**Vacillate** means fluctuate.
Sample sentence: *He is still vacillating between studying abroad or working in his family business.*
Assimilate is the most appropriate word to fill in the blank.

Question Number: 34
Correct Option: d
**Explanation: - Accrued** means grown by addition.
Sample sentence: *If you don't pay your bills on time they will accrue and you will have to pay a heavy amount.*
- **Redounds** mean to have a good or bad effect.
Sample sentence: *His courageous acts will redound on him.*
-**Impacted** means packed in together or overcrowded.
Sample sentence: *It is an impacted district of Punjab.*
- **Clupeid** is a type of fish.

Question Number: 35
Correct Option: a
**Explanation:** Quirk means a peculiar aspect of a person's character or behavior.
- Aberration means unusual.
- Normality means the state of being usual.
- Useless means not able to achieve.
- Inability means a state of being unable to do something.
Hence aberration is the correct synonym.

Question Number: 36
Correct Option: b

**Explanation:** Vulnerable means exposed to the possibility of being attacked.
- Tested means performance.
- Pushover means who is easy to overcome.
- Lashed means having eyelashes of a specified kind.
- Bendability means flexibility.
Hence pushover is the correct synonym.

Question Number: 37
Correct Option: c
**Explanation: - Addled** means confused or vague.
Sample sentence: *Overthinking can addle your head.*
**- Acumen** mean insightfulness.
Sample sentence: *He has a great medical acumen.*
**- Bequeath** means given by will after one's death.
Sample sentence: *She bequeathed his entire property to her granddaughter.*
**- Propelled** means cause to move forward with force.
Sample sentence: *Ahmed was propelled by administration to take action against his subordinates.*

Question Number: 38
Correct Option: a
**Explanation:** Contemplate means to think deeply on/about something.
- Overlook means to ignore something.
- Ponder means thinking about something carefully.
- Convulsion means sudden and violent movement of the body.
- Consider means to think about and be drawn towards something.
Hence overlook is the correct antonym.

Question Number: 39
Correct Option: d
**Explanation: - Exemplified** means represent.
Sample sentence: *The manager exemplified the use of new machinery.*
**- Umbrageous** means shadowed.
Sample sentence: *My house is covered with tall umbrageous tress.*
**- Panegyrical** means formally expressing praise.
Sample sentence: *After the famous leader died, a poet wrote a panegyrical to honor his life.*
**-Altruistic** means showing unselfish concern for the welfare of others.
Sample sentence: *Ali always provides his services in cash and kind for uplifting the community. His altruistic traits have earned him a lot of respect.*
Therefore, Altruistic is the most appropriate word to fill in the blank.

Question Number: 40
Correct Option: b
**Explanation: - Subsequent** mean following in time or order.
Sample sentence: *Teacher told me that we will cover new concepts next week in subsequent topics.*
**- Antecedent** means anything that precedes something similar in time.
Sample sentence: *The now-outdated Newtonian model of physics is the antecedent of all subsequent developments in the field.*
**-Occurrent** means presently occurring.
Sample sentence: *Malaria is occurrent in slums.*
**- Grapheme** means graphical symbol.
Sample sentence: *The old cave has large number of grapheme, only experts can comprehend them.*
**Antecedent** is an appropriate word to fill in the blank.

Question Number: 41
Correct Option: a
**Explanation: - Aspersion** means a disparaging remark.
Sample sentence: *He is such a humble guy but I was shocked when I saw him casting aspersion on his wife.*
**- Aberration** means a disorder in one's mental state.
Sample sentence: *Due to some mental aberration he forgets whatever is said to him.*
**- Abolition** means act of abolishing a system.
Sample sentence: *Slavery should be abolished from every part of the world.*
**- Abundance** means property of a more than adequate quantity or supply.
Sample sentence: *The store manager told the biscuit sales man that he has abundant stock of biscuits, he will not order more.*
Aspersion is the most appropriate word to fill in the blank.

Question Number: 42
Correct Option: a
**Explanation: - Apprehension** means fearful expectation.
Sample sentence: *Doctor shared all the apprehensions related to Amjad's health.*
**- Apprise** means advise or to tell.
Sample sentence: *The Chief Minister has been apprised of the situation.*
**- Inculpation** means blame.
Sample sentence: *He has been inculpated of theft although there wasn't sufficient evidence against him.*
**- Incrimination** means accusation that you are responsible for some lapse.
Sample sentence: *Sam was not found guilty because investigators could not find enough incriminating evidence against him.*
**Option A, Apprehension** is correct.

Question Number: 43
Correct Option: c
**Explanation: - Doted** means shower with love.
Sample sentence: *Asma was the youngest sibling. Everyone doted on her.*
**- Imparted** means transmit knowledge or skills.
Sample sentence: *It is a teacher's responsibility to impart appropriate knowledge to his students.*
**-Battered** means violent attack.
Sample sentence: *People involved in battering equates to a criminal offense.*
**- Apprehend** means arrest someone.
Sample sentence: *Police apprehended the robber from his dwelling.*
Therefore, Battered is the most appropriate word to fill in the blank.

Question Number: 44
Correct Option: b

**Explanation: - Beckoned** means signal with hands or nod.
Sample sentence: *My father beckoned me to follow him.*
**- Acquiesce** means to agree or express agreement.
Sample sentence: *My boss acquiesced to my request and granted me a leave for 10 days.*
**- Spurned** means reject.
Sample sentence: *My mother spurned my request and did not allow me to play with friends.*
**- Scorned** means hated.
Sample sentence: *His mischief was scorned by his team mates.*

Question Number: 45
Correct Option: a
**Explanation: - Audacious** means invulnerable to fear.
Sample sentence: *Your decision to go alone to the forest is audacious.*
**- Agoraphobic** means afraid of open or public places.
Sample sentence: *A sales man should not be agoraphobic.*
**- Dismay** means discouragement.
Sample sentence: *He could not hide his dismay at his failure.*

**- Coerce** means pressure or to force.
Sample sentence: *Law does not allow coercive conversion. Rather, it asks for peaceful preaching.*
Therefore, Audacious is the most appropriate word to fill in the blank.

Question Number: 46
Correct Option: d
**Explanation: - Amenity** means pleasantness resulting from agreeable conditions.
Sample sentence: *The government promised to provide amenities in rural areas to uplift the living condition of the locals.*
**- Drollery** means a comic incident.
Sample sentence: *We enjoyed and laughed so much at his drollery.*
**- Frivolity** means not serious.
Sample sentence: *The CEO labels the complaints of the trade union as frivolous and did not pay heed to it.*
**- Frippery** means something of little value.
Sample sentence: *He never wore the shirt which I gave to him, considering it to be mere frippery.*

# SENTENCE CORRECTION

1. Choose the correct answer
   a. Brad considers me his best friend.
   b. Brad consider me his best friend
   c. Brad considers me as his best friend.
   d. Brad consider me as his best friend.

2. Choose the correct answer
   a. I saw the old lady you said live next door.
   b. I saw the old lady whom you said lived next door.
   c. I saw the old lady whom you said lived next door.
   d. I saw the old lady who you said lived next door.

3. choose the correct answer
   a. If he would ask me, I would have come.
   b. If he asked me, I would come.
   c. If he would ask me, I would come.
   d. If he would have ask me, I would come.

4. Choose the correct answer
   a. Old man was injured in a car accident.
   b. Old man was wounded in a car accident.
   c. Old man had been wounded in a car accident.
   d. Old man had wounded in a car accident.

5. choose the correct answer
   a. The reason is that I believe it.
   b. The reason is because I believe that.
   c. The reason is because I believe it.
   d. The reason is because I believe in it.

6. Choose the correct answer
   a. The train left already before I arrived at the station.
   b. The train had already left before I arrived at the station
   c. The train already left before I arrived at the station.
   d. The train had left already before I arrived at the station.

7. Choose the correct answer
   a. From now and on I'll study hard.
   b. From now on I'll study hard
   c. From now and onwards I'll study hard.
   d. From on and now I'll study hard

8. Choose the correct answer
   a. Has there space for me on the bus?
   b. Has there been any space for me on the bus?
   c. Is there space for me on the bus?
   d. Is there room for me on the bus?

9. Choose the correct answer
   a. Never I have heard a such of thing.
   b. Never have I heard of such a thing.
   c. Never I have heard for such a thing.
   d. Never I have heard of such a thing.

10. Choose the correct answer
    a. They replaced gold with paper money.
    b. They substituted gold with paper money.
    c. They substituted gold of paper money.

d. They substituted gold by paper money.

11. Choose the correct answer
a. Johnny loved money; he was miser.
b. Johnny had loved money; he was a miser.
c. Johnny loves money; he was miser.
d. Johnny loved money; he was a miser

12. choose the correct answer
a. I have found all the windows opened.
b. I have found all the windows open
c. I had found all the windows opened
d. I had found all the windows open

13. Choose the correct answer
a. He is stronger than William.
b. He is more stronger than William.
c. He is very stronger than William.
d. He is bit stronger than William.

14. Choose the correct answer
a. From where can I buy a good watch?
b. From where I can buy a good watch?
c. Where can I buy a good watch?
d. Where I can buy a good watch?

15. choose the correct answer
a. In my opinion, she is a thief.
b. According to my opinion, she is a thief.
c. As my opinion, she is a thief.
d. As according to my opinion, she is a thief

16. Choose the correct answer
a. Joseph is behaving friendly.
b. Joseph behaves in a friendly way.
c. Joseph behaves friendly.
d. Joseph had been behaving friendly.

17. Choose the correct answer
a. Henry and Scott are both good chefs, but I prefer the latter.
b. Henry and Scott are both good chefs, but I prefer the last
c. Henry and Scott are both good chefs, but I prefer the later
d. Henry and Scott are both good chefs, but I prefer the least.

18. Choose the correct answer
a. I'll see you when I come back from battle.
b. I'll see you when I shall be back from battle.
c. I'll see you when I shall come back from battle.
d. I'll see you when I would come back from battle.

19. Choose the correct answer
a. They've no houses to live in.
b. They don't have house to live.
c. They've no house to live.
d. They've no houses to live

20. Choose the correct answer
a. Be careful not to lose your money.
b. Be carefull not to lose your money.
c. Be careful not to loose your money.
d. Be carefull not to loose your money.

21. Choose the correct answer
a. She says she's afraid of not anybody
b. She says she's afraid of nobody
c. She says she's not afraid of nothing.
d. She says she's not afraid of nobody.

22. Choose the correct answer
a. A large supply of mobile has been expected.
b. A large supply of mobiles is expected.
c. A large supply of mobiles are expected.
d. A large supply of mobiles has expected

23. Choose the correct answer
a. I like you! Will you marry me?
b. I want you! Will you marry me?
c. I adore you! Will you marry me?
d. I love you! Will you marry me?

24. Choose the correct answer
a. Because Larry worked hard he could finish the job in time.
b. Because Larry worked hard he was able to finish the job in time.
c. Because Larry work hard he could finish the job in time.
d. Because Larry worked hard he can finish the job in time

25. Choose the correct answer
a. Nelson complains that his wage is low.
b. Nelson complains that his wages are low.
c. Nelson complains that his wage has been low
d. Nelson complains that his wage are low

26. Choose the correct answer
a. Martha is stronger of everybody
b. Martha is stronger then everybody
c. Martha is stronger than everybody.
d. Martha is stronger than everybody else.

27. Choose the correct answer
a. He's grown into a lovely young man
b. He's grown into a pretty young man
c. He's grown into a beautiful young man.
d. He's grown into a handsome young man.

28. Choose the correct answer
a. I'll may write her tomorrow
b. I'll write her tomorrow
c. I would write her tomorrow.
d. I'll write to her tomorrow.

29. Choose the correct answer

a. Think of a number and than double it.
b. Think a number and than double it.
c. Think of a number and then double it.
d. Think a number and then double it.

30. Choose the correct answer
a. The school builds good character.
b. The school is building good characters
c. The school builds good characters. .
d. The school build good characters

31. Choose the correct answer
a. I am going to see a theater tonight.
b. I am going to watch a theater tonight
c. I have been going to see a theater tonight.
d. I am going to see a play tonight

32. Choose the correct answer
a. Be careful not to loose your money
b. Be careful not to loose your money.
c. be carefull not to lose your money.
d. Be careful not to lose your money

33. Choose the correct answer
a. The examiner made me sit quietly until everyone had finished.
b. The examiner let me sit quietly until everyone had finished.
c. The examiner let me sit quiet until everyone had finished.
d. The examiner let me sit quietly till everyone had finished.

34. Choose the correct answer
a. Jane lives three miles far from here.
b. Jane lives three mile far from here
c. Jane lives three miles from here.
d. Jane use to live three miles far from here.

35. Choose the correct answer
a. Young men dream glory and riches. .
b. Young men dream of glory and riches
c. Young men dream a glory and riches
d. Young men dream for glory and riches.

36. choose the correct answer
a. It is better to enjoy yourself when you're young unless wasting time worrying about the future
b. It is better to enjoy yourself when you're young rather than wasting time worrying about the future.
c. It is better to enjoy yourself when you're young than to waste time worrying about the future.
d. It is better to enjoy yourself when you're young other than wasting time worrying about the future

37. Choose the correct answer
a. You can't make Bob to understand.
b. You can't made Bob to understand
c. You couldn't make Bob to understand.
d. You can't make Bob understand

38. Choose the correct answer
a. I heard everything which he said about my family.
b. I have heard everything which he said about my family
c. I heard everything that he said about my family
d. I heard everything what he said about my family.

39. Choose the correct answer
a. I haven't made any mistake in dictations.
b. I haven't make any mistake in dictation.
c. I haven't made any mistakes in dictation.
d. I had not made any mistake in dictation.

40. Choose the correct answer
a. The scissors is lying on the table.
b. The scissors are lying on the table.
c. The scissor are lying on the table
d. The scissor has lying on the table

41. Choose the correct answer
a. I went to the bakery to take bread.
b. I went to the baker's to buy bread.
c. I am going to the baker's to take bread.
d. I went to the baker's to take bread.

42. Choose the correct answer
a. You don't look like your mother.
b. You don't look like as your mother
c. You don't look as your mother.
d. You don't looks as your mother.

43. Choose the correct answer
a. Mike came late because of an accident.
b. Mike came late due to an accident.
c. Mike came lately because of an accident.
d. Mike came lately due to an accident.

44. Choose the correct answer
a. The number of pupils is increasing.
b. The number of pupils are increasing.
c. The numbers of pupils are increasing
d. The numbers of pupil is increasing.

45. choose the correct answer
a. My bicycle worth's £80.
b. My bicycle is worth £80
c. My bicycle is a worth of £80.
d. My bicycle have worth of £80.

46. Choose the correct answer
a. Have you weighted the letter?
b. Have you weight the letter?
c. Have you weigh the letter?
d. Have you weighed the letter?

47. Choose the correct answer
    a. French isn't easy to be learned.
    b. French hasn't easy to be learned
    c. French isn't easy to learn.
    d. French isn't easy to get learned.

48. Choose the correct answer
    a. Once had lived a great emperor.
    b. Once lived a great emperor.
    c. There once lived a great emperor.
    d. Lived once a great emperor

49. Choose the correct answer
    a. Why were you absent last Friday?
    b. Why you were absent last Friday?
    c. Why you was absent last Friday?
    d. Why you had absent last Friday?

50. Choose the correct answer
    a. The man was found in his office.
    b. The man had found in his office
    c. The man had been found in his office.
    d. The man was in his office.

# ANSWERS & EXPLANATIONS (SENTENCE CORRECTION)

Question Number: 1
Correct Option: a

**Explanation:** Option **B** is incorrect because there is no subject-verb agreement. Subject Verb agreement means if subject is singular then verb has to be singular as well. Therefore, Brad is singular, it is incorrect to use consider with it, correct verb would be **considers**
We don't use **"as"** after the word consider, this implies that **option C and D** are incorrect.
Correct answer is **Option A.**

Question Number: 2
Correct Option: d
**Explanation:** - We rarely use whom in modern English. We still use it after prepositions like, to, by, with etc.
- Hence, D is correct according to modern English while C is incorrect by not following the rule explained above.
- B has a wrong word, whom. A is also incorrect due to wrong tense.

Question Number: 3
Correct Option: b
**Explanation:** The sentence above expresses an improbable condition by the past tense and uses the condition in the main clause.
The use of past tense doesn't indicate a time but a degree of probability.
Hence B is correct by following this rule while A, C & D are incorrect.

Question Number: 4
Correct Option: a
**Explanation:** - People are injured or hurt as a result of car accident, but people are wounded in wars and battles.
Hence, **injured** in an accident, option **A** is correct while B, C & D are incorrect.

Question Number: 5
Correct Option: a
**Explanation:** - The word "reason" denotes cause.
- "Because" also means reason/cause Therefore, using "because" after "reason" leads to the repetition of the same word, making the sentence grammatically incorrect.
- Hence, option A is the only right choice.

Question Number: 6
Correct Option: b
**Explanation:** - Use the past perfect when the time of one past action is more past than that of another. Past perfect tense implies that something already happened in the past before anything else happened. For example: The train left the station before the writer reached the station.
- Use past perfect tense for the action which was completed first. For example: The train had already left. The second action in the past tense (before I arrived at the station)
Hence, B is correct by following this rule while A, C & D are incorrect.

Question Number: 7
Correct Option: b
**Explanation:** - Phrase ***now and on*** is incorrect, we say from ***now on***.
Hence, B is correct by following this rule while A, C & D are incorrect by not following the rule.

Question Number: 8
Correct Option: d
**Explanation:** - Room means, a space that can be occupied.
- Space means an occupied area which can be kept devoid of occupation.
The writer is looking for an empty seat which he can occupy. Option D is correct while A, B & C are incorrect.

Question Number: 9
Correct Option: b

**Explanation:** - When never is placed in the beginning of a complete clause, the verb (have) must come before the subject (I).
Hence, B is correct by following this rule while A, C & D are incorrect by not following the rule.

Question Number: 10
Correct Option: a
**Explanation:** - We replace one thing with another. The replaced thing/person assumes or performs the new role. When we replace, usually the change is permanent. For example: The coach replaced a player due to his poor performance.
- But we substitute one thing for another. The change is usually not permanent. For example: The coach substituted player because he was injured. Sentence implies that, once the injured player recovers we will be back.
Hence, it's a replacement of gold because money has permanently taken over the role of gold as a medium of exchange So, A is correct while B, C & D are incorrect.
Question Number: 11
Correct Option: d
**Explanation:** We need to understand the following concepts to deal with this question:
- Option A and C are wrong because it does not use article "a" before miser. Miser is a singular noun, therefore, it must proceed with article "a". Article A/An are not used when there is a plural noun, uncountable noun or a real noun (names of places and persons)
- Secondly, miser has been wrongly used as an adjective, it is a noun. In D, the word miser is used as a noun, while in A and C it's being used as an adjective. In B, the tense is incorrect.

Question Number: 12
Correct Option: b
**Explanation:** - Option A and C involves wrong use of word opened as verb, while open is an adjective here.
For example (open as a Verb):
- I will open an account in a new bank.
For example (open as an Adjective):
- You left the container open.
- Option D is in past perfect tense which means that something happened in past that impacted on a later event in the past. For example: i had found all windows open and room was filled with dirt.
- Option B is in present perfect tense, it means something happened in past with an impact on the present. Hence, it is the correct choice.

Question Number: 13
Correct Option: a
**Explanation:** - Double comparatives are incorrect, which means option B is incorrect, you can either use ***stronger*** or ***more strong.***
- We use ***very*** before adjectives to intensify emphasize. For example: *He is very strong*. In English grammar, we can use ***very much*** or ***not very*** to increase focus on comparative adjective. For example: *He is very much stronger than William.*
- Similarly, ***bit*** cannot commonly used to modify comparative adjective. Even if it is used, we use ***a bit*** not ***bit.***
According to above explanation, Option A is the correct choice.

Question Number: 14
Correct Option: c
**Explanation:** - ***Where*** means at what place, while ***from where*** denotes the point of origin.
- Option D is incorrect because the speaker is asking a question, therefore, ***Can*** will come before ***I.*** **For example: *Where can I buy a good watch?***
Hence, **C** is correct while A & B are incorrect. D has a wrong tense.

Question Number: 15
Correct Option: a
**Explanation:** - It is appropriate to use *in my opinion* in the beginning of a sentence, avoid using according to, as according to or as my opinion, in the beginning of a sentence.
Hence, **A** is correct by following this rule while B, C & D are incorrect by not following the rule.

Question Number: 16
Correct Option: c
**Explanation:** We need to understand the following concepts to deal with this question:
- Not all the words ending with ly are adverbs. Certain words ending in ly tends to be an adjective such as: friendly, silly, lively, lovely, miserly, unlikely.
- An adverb modifies a verb. For example: He runs extremely fast. When an adverb modifies the verb (run) we don't use adverb phrases such as, in a friendly manner, in a silly manner.
- Adjectives do not modify the verb therefore, we use adverbial phrase with it.
Hence, option C is correct.

Question Number: 17
Correct Option: a
**Explanation:** All sentences are grammatically correct, but the problem is with the last word.
- Latter mean second of two people.
- Last refers to the only one remaining.
- Series means set of successive volume.
Hence, latter is the appropriate word here and so A is correct.

Question Number: 18
Correct Option: a
**Explanation:** The sentence in the question shall follow the following rule:
- If the verb in the main clause (will) is in the future, the verb in the time clause (come) must be in the present tense.

-Time clause comes after the main clause. A time clause begin with: when, whenever, since, while, once, as soon as. Futurity is highlighted in main clause whereas time clause is stated in present tense.
- Hence, only option A is correct by using present verb in the time clause while B, C & D are incorrect by not using present verb.

Question Number: 19
Correct Option: a
**Explanation:** -Transitive verb: A transitive verb is the one that requires an object to exert its action. In our question above, live is the transitive verb, house is the object. The sentence will be meaningless if we simply write "They've no."
- We must use the preposition "in" after transitive verb "live" to make it meaningful.
Hence, A is correct as per this rule while B, C & D are incorrect.

Question Number: 20
Correct Option: a
**Explanation:** - Loose is an adjective meaning unfastened, free. For money we use lose, hence A is correct.
- While B has a spelling mistake.
- C & D are incorrect because of the usage of loose.

Question Number: 21
Correct Option: b
**Explanation:** In the English grammar, we cannot use two negative words together in a sentence because either it creates confusion or distorts the meaning of the sentence.
For example (sentence with double negative): You can't see no one in this crowd. The sentence seems to be grammatically incorrect.
Hence, option B is correct by following this rule while A, C& D are incorrect by using double negatives.

Question Number: 22
Correct Option: b
**Explanation:** - When the subject (large supply) is singular, the verb (is) must be singular.
- Helping verb Is in phrase is used for large supply not for the plural word mobiles.
- Has is used with singular noun (for example: Ali has) nouns and pronouns (for example: she has). Mobiles is a plural noun.
Hence, B is correct, while A, C & D are incorrect.

Question Number: 23
Correct Option: d
**Explanation:** All verbs can be used for people, the only difference is one of the degree. Love is much stronger feeling than others verbs.
Hence, D is correct due to a stronger degree while A, B & C are not correct when used in comparison with love.
Question Number: 24
Correct Option: b
**Explanation:** ***Larry was able to complete his job in time due to his hard work.***
In such a case, we use, "able to" not "could".
Could would have been appropriate if hard work was not performed and we have been suggesting Larry to work hard as it would help him complete his work in time.

Question Number: 25
Correct Option: b
**Explanation:** Wages is a plural noun and takes plural verb.
Hence, B is correct, and A, C & D are incorrect.

Question Number: 26
Correct Option: d
**Explanation:** - In the English grammar, we use the word *else* in making a comparison between one person or thing and all others of the same kind.
- Option B uses the wrong word *then* instead of *than*. **Then** means immediately or soon afterwards, whereas, **than** is used when making comparisons.
Hence, D is correct.

Question Number: 27
Correct Option: d
**Explanation:** The question involves the wrong use of an adjective.
- Handsome is used to compliment a man, while, beautiful, pretty or lovely are commonly used to compliment a woman.
Hence, D is correct while A, B & C are incorrect.

Question Number: 28
Correct Option: d
**Explanation:** - We always write to a person, not write a person.
Hence D is correct according to this rule while A, B & C are incorrect as per rule.

Question Number: 29
Correct Option: c
**Explanation:** Following.rules and errors are related to the sentence above:
- We think of a person/number not think a person / number. Option B and D are incorrect because they do not use the preposition of.
- Than is used for comparison. For example: Ali is taller than Amjad. Then means immediately or soon after. For example: First eat then drink water. This rule makes option A incorrect.
Hence, option C is the correct choice.

Question Number: 30
Correct Option: a
**Explanation:** - Option B makes unnecessary use of gerund (building).
- Option C and D uses plural form, characters. The plural form characters, denotes the letters of the alphabets, or people in a book or play. For example: The new movie has 10 characters.

Hence, it's a character built by a school, so, A is correct while B, C & D are incorrect.

Question Number: 31
Correct Option: d
**Explanation:** - A theatre is a building in which plays are acted, not the play itself.
Hence, the correct phrase is, I am going to see a play not a theatre. So, D is correct while A, B & C are incorrect.

Question Number: 32
Correct Option: d
**Explanation:** - Loose is an adjective meaning unfastened, free. Which means option A and B are wrong
- Lose means fail to keep, retain or preserve. For money we use lose. Option C has a spelling mistake (carefull).
Option **D** is the correct answer.

Question Number: 33
Correct Option: a
**Explanation:** - Let means to allow.
- Make means to cause, induce, compel. In the sentence above, examiner is compelling him to sit quiet.
Hence, A is correct because made is used.

Question Number: 34
Correct Option: c
**Explanation:** - When we use a phrase stating a definite distance (three miles), in a sentence, don't use the word far.
Hence, C is correct by following this rule while A, B & D are incorrect by not following the rule.

Question Number: 35
Correct Option: b
**Explanation:** - Among other uses of the preposition of, it is also used for relating something with someone.
-- Among other uses of preposition for, it is indicates intended to be given
- We dream of a thing, not dream a thing.
Hence, B is correct.

Question Number: 36
Correct Option: c
**Explanation:** It is important to have consistency in the form of verb in a sentence. If the first verb in a comparison is in the infinitive, the second must also be in infinitive. In simple, an infinitive verb is a verb that uses the word **"to"** along with it. For example in our sentence above: **"to enjoy", "to waste"**
Hence **C** is correct by following this rule while A, B & D are incorrect by not following the rule.

Question Number: 37
Correct Option: d
**Explanation:** - A verb that begins with ***to*** is an infinitive verb. In our question above, ***understand*** is the verb, ***to understand*** is an infinitive verb.
- An infinitive phrase involves the use of **"to"** along with the verb but however, we use infinitive without **"to"** after modal verbs (e.g: can, could, shall, should etc.).
- According to this rule, the only option correct is **D**.

Question Number: 38
Correct Option: c
**Explanation:** Relative pronoun: A relative pronoun is used to join a clause to a noun or pronoun. Commonly used relative pronouns are that, which, who, whose, whom.
-In English grammar we don't use relative pronouns which and what after everything. We can use that after it, or it can be omitted. If we omit relative pronoun that, the sentence will still make sense, I heard everything he said about my family.
Hence C is correct by using that he said.

Question Number: 39
Correct Option: c
**Explanation:** - Use mistakes not mistake with a qualifier (a qualifier in English grammar refers to a word or a phrase that comes before an adverb or an adjective to increase or lessen the impact of the adjective or adverb it precedes) any, because any here means more than one mistake.
Option B also involves the use of the wrong tense (make).
Hence, option C is correct.

Question Number: 40
Correct Option: b
**Explanation:** - Option A and C lack subject verb agreement.
- In option A, Subject (scissors) is plural and verb (is) used is singular.
- In option C, Subject (scissor) is singular and verb (are) used is plural.
- Option D is grammatically incorrect.
Hence, Option B is correct.

Question Number: 41
Correct Option: b
**Explanation:** - Take means to obtain possession by voluntary action. Buy means, to obtain possession by paying for it. Take and buy cannot be used interchangeably, both differ in meaning.
- You buy from baker not take it for free or by force.
Hence, in B, buy is used which is correct while A, C & D are incorrect because take is used instead of buy.

Question Number: 42
Correct Option: a
**Explanation:** - Like is usually used when comparing two things. For example: The young man, like his brother, has long hair. The word like means 'similar to'.
-Like is used when giving an example. For example: There are many car options within your budget, like Toyota, Honda, Suzuki and Mazda.
- Like is used to praise something. For example: I like your shoes because they look very decent.

- As denotes 'in the same way'. As has multiple uses which helps us to understand how the two words as and like have different usage.
- As is used to depict a person's occupation or position. For example: As a doctor, my job is to attend patients.
- As helps to draw analogies or comparison between two entities. For example: He is as brave as a lion.
-As is used when two events occur together. For example: As I was running, I fell.
-As is used to give a reason. For example: As she was driving, she didn't attend your call.
Hence, option A is correct.

Question Number: 43
Correct Option: a
**Explanation:** The question involves the wrong use of preposition
- It is important to know when to use *because of* and when to use *due to.*
- **"Because of'** means "as a result of". For example: *He had a migraine because of the food he had.*
- **"Due to"** means resulting from. For example: *The team suffered losses due to her negligence.*
Therefore, in the question above, option A is appropriate.

Question Number: 44
Correct Option: a
**Explanation:** - When the word number is preceded by the article the, it denotes a unit and is singular, so, A is correct, while B, C & D are incorrect which are against this rule.
- Option B and C use are instead of is.

Question Number: 45
Correct Option: b
**Explanation:** - Wrong use of a in option C. We use a when we are referring to nothing specific, for example: A bicycle costs $80.
- Have implies possession. It is correct to say, I have a bicycle which is worth $80 but option D is grammatically incorrect.
- Option A is also grammatically incorrect.
Hence, option B is correct.

Question Number: 46
Correct Option: d
**Explanation:** - Weight is a noun, while the verb is weigh. D is correct, while noun is used in A and B so these are incorrect. In C, tense is incorrect.
- We use an auxiliary verb/helping verb (have) with main verb (weighed) to give it a full meaning.

Question Number: 47
Correct Option: c
**Explanation:** ***-Has*** is used with singular nouns (for example: Ali has) and pronouns (for example he has) not with adjectives. Option B can be eliminated.
***-Get*** means to obtain, option D uses the word ***get*** wrongly.
- **Infinitive:** An infinitive in English grammar is to use, ***"to"*** before verb (learn).**Infinitive verb:** *to learn.*
- Adjective ***'easy'*** is generally followed by the infinitive ***to.***
Hence, C is correct by following this rule while A, B & D are incorrect by not following the rule.

Question Number: 48
Correct Option: c
**Explanation:** Use the adverb there to introduce the subject (emperor) in which the verb (lived) stands before the subject.
Hence, C is correct by following this rule while A, B & D are incorrect by not following the rule. Option A and D also have wrong tense.

Question Number: 49
Correct Option: a
**Explanation:** - In questions beginning with an interrogative word, like what, why, who, place the verb (were) before the subject (you).
Hence, A is correct by following this rule. Option B and C are incorrect by not following the rule. Option D uses wrong tense.

Question Number: 50
Correct Option: d
**Explanation:** Verb found means discovered, like diamonds are discovered.
The man was in the office suggests that the man had hidden himself in his office and was later discovered.
Hence, D is correct while A, B & C are incorrect.

# PREPOSITIONS

1. Identify the preposition in the following sentence
The children go to school on weekdays.
a. Children
b. Go
c. On

2. Fill in the blank with the correct preposition
Sarmad travelled ___ Europe for vacations.
a. Between
b. Across
c. On

3. Fill in the blank with the correct preposition
Alina went ____ the room to find her jeans.
a. Into
b. On
c. Across

4. Fill in the blank with the correct preposition
The key is ____ the car.
a. Inside
b. Between
c. At

5. Fill in the blank with the correct Article. (A, An, The)
They were searching for __ apartment.
a. A
b. An
c. The

6. Fill in the blank with the correct preposition
Fatima asked her mother to buy her a present ___ her birthday.
a. Between
b. On
c. In

7. Fill in the blank with the correct preposition
The guests refused to leave ____ the dessert was served.
a. Before
b. After
c. Between

8. Fill in the blank with the correct Article. (A, An, The)
__ hole was dug in the cabinet.
a. A
b. An
c. The

9. Fill in the blank with the correct preposition
Amna prefers to study ___ the library.
a. At
b. On
c. In

10. Identify the preposition in the following sentence
Omer threw the bag under the stairs quickly.
a. Omer
b. Threw
c. Under

11. Identify the preposition in the following sentence
He disappeared very mysteriously on Saturday.
a. He
b. Disappeared
c. On

12. Identify the preposition in the following sentence
I went on a trip with my friends.
a. I
b. Went
c. On

13. Identify the preposition in the following sentence
Alan took his dog outside for a walk.
a. Alan
b. Took
c. Outside

14. Fill in the blank with the correct preposition
The painting hanging ___ the wall was beautiful.
a. On
b. At
c. In

15. Fill in the blank with the correct Article. (A, An, The)
She rode ___ horse.
a. A
b. An
c. The

16. Identify the preposition in the following sentence
I shall go to bed because I am exhausted.
a. I
b. To
c. Go

17. Fill in the blank with the correct preposition
I am ____ your place.
a. Near
b. By
c. Between

18. Identify the preposition in the following sentence
We went up the hill for a picnic.
a. We
b. Went
c. Up

19. Fill in the blank with the correct preposition
She was _____ a mask.

a. Without
b. Between
c. At

20. Identify the preposition in the following sentence
The train passed through the tunnel in the blink of an eye.
a. Train
b. Passed
c. Through

21. Fill in the blank with the correct preposition
Sahar is ____ the kitchen.
a. In
b. Over
c. With

22. Identify the preposition in the following sentence
The paintings are hanging on the wall.
a. Paintings
b. Hanging
c. On

23. Fill in the blank with the correct preposition
James is ___ Spain for the holidays.
a. On
b. In
c. At

# ANSWERS & EXPLANATIONS
## PREPOSITIONS

Question Number: 1
Correct Option: c
**Explanation:** The correct answer is 'On' indicating the exact time of the action. 'Go' is the verb, demonstrating the action being performed. 'Children' is the noun.

Question Number: 2
Correct Option: b
**Explanation:** The correct answer is 'Across' which refers to moving from one place to another. 'Between' refers to being in the middle of two places or points. 'On' indicates the position of something on top of another.

Question Number: 3
Correct Option: a
**Explanation:** The correct answer is 'Into' because it refers to someone entering some place. 'On' refers to something being placed on a surface. 'Across' refers to something moving between two points.

Question Number: 4
Correct Option: a
**Explanation:** The correct answer is 'Inside' because it indicates the exact location or position of the object. 'Between' refers to something in the middle of two objects. 'At' refers to an object arriving at a location which does not apply in this case.

Question Number: 5
Correct Option: b
**Explanation:** The correct answer is 'An' because apartment starts with a vowel and is not a specified noun.

Question Number: 6
Correct Option: b
**Explanation:** The correct answer is 'On' because it is used for specific days and dates. 'In' is used specifically for bigger periods, such as months or years. 'Between' refers to being within an interval.

Question Number: 7
Correct Option: a
**Explanation:** The correct answer is 'Before' because it refers to something not happening till the agenda is achieved. 'After' as a preposition is used to indicate something that comes in a manner following a series of events. 'Between' refers to something happening in the middle of two events.

Question Number: 8
Correct Option: a
**Explanation:** The correct answer is 'A' because a general noun is mentioned starting without a vowel.

Question Number: 9
Correct Option: c
**Explanation:** The correct answer is 'in' because it clearly indicates that she will study inside the library. 'At' is used when an exact location or place is being indicated. 'On' usually is used when a certain period of time is being indicated.

Question Number: 10
Correct Option: c
**Explanation:** The correct answer is 'Under', which is a preposition to demonstrate the position of the object upon which the action is being performed. 'Omer' is the noun performing the action. 'Threw' is the action being performed so it is the verb.

Question Number: 11
Correct Option: c
**Explanation:** The correct answer is 'on' which demonstrates exactly when the action occurred. 'He' is the pronoun. 'Disappeared' is the verb, demonstrating the action being performed.

Question Number: 12
Correct Option: c
**Explanation:** The correct answer is 'On' which shows the course of action being performed by the noun or pronoun. 'We' is the pronoun performing the action. 'Went' is the verb, demonstrating the action being performed.

Question Number: 13
Correct Option: c
**Explanation:** The correct answer is 'Outside' which shows where the action is being performed. 'Alan' is the noun performing the action. 'Took' is the verb, demonstrating the action being performed.

Question Number: 14
Correct Option: a
**Explanation:** The correct answer is 'On' because it indicates something being present on a certain surface. 'In' is used to refer to something within certain boundaries. 'At' is used to refer to something at a specific point.

Question Number: 15

Correct Option: a
**Explanation:** the correct answer is 'A' because horse is an unspecified noun, and does not start with a vowel.

Question Number: 16
Correct Option: b
**Explanation:** The correct answer is 'To' which is a preposition for movement. 'I' is the pronoun performing the action. 'Go' is the verb, demonstrating the action being performed.

Question Number: 17
Correct Option: a
**Explanation:** The correct answer is 'Near'. 'By' is used to communicate when a person is beside something or someone. 'Between' is used to indicate that something is on a middle ground. 'Near' most exactly demonstrates the location of the person, and makes sense grammatically.

Question Number: 18
Correct Option: c
**Explanation:** The correct answer is 'Up' which indicates the location or movement of the noun or pronoun. 'We' is the pronoun. 'Up' is the verb demonstrating the action.

Question Number: 19
Correct Option: a
**Explanation:** The correct option is 'Without' which indicates that the person wasn't with a certain item, i.e. a mask. 'Between' refers to someone between in the middle of two points. 'At' refers to someone being at a very specific location.

Question Number: 20
Correct Option: c
**Explanation:** The correct answer is 'Through' which indicates the direction or position of the noun. 'Train' is the noun performing the action. 'Passed' is the verb, demonstrating the action being performed.

Question Number: 21
Correct Option: a
**Explanation:** The correct answer is 'In' which indicates that Sahar is inside the kitchen. 'Over' indicates that the person is crossing an area from place to another. 'With' indicates that the person is personally next to the object, which doesn't apply here.

Question Number: 22
Correct Option: c
**Explanation:** The correct answer is 'On' showing the location of the object. 'hanging' is the verb. 'Paintings' is the noun.

Question Number: 23
Correct Option: b
**Explanation:** The correct option is 'In' because it refers to something or someone being within the confines or boundaries of something. 'At' refers to something being present at a certain point.

# READING COMPREHENSION

## SOLVED EXERCISE

**ctions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the e answer for each question. Answer all questions following a passage on the basis of what is stated or implied in that sage.

**wer of each question has been given at the bottom of exercise.**

**sage**

mocratic societies from the earliest times have expected their governments to protect the weak against the strong. No d good feeling' can justify discharging the police force or giving up the idea of public control over concentrated private lth. On the other hand, it is obvious that a spirit of self-denial and moderation on the part of those who hold economic wer will greatly soften the demand for absolute equality. Men are more interested in freedom and security than in an al distribution of wealth. The extent to which Government must interfere with business, therefore, is not exactly sured by the extent to which economic power is concentrated into a few hands. The required degree of government terference depends mainly on whether economic powers are oppressively used, and on the necessity of keeping nomic factors in a tolerable state of balance.

with the necessity of meeting all these dangers and threats to liberty, the powers of government are unavoidably reased, whichever political party may be in office. The growth of government is a necessary result of the growth of chnology and of the problems that go with the use of machines and science. Since the Government in our nation, must e on more powers to meet its problems, there is no way to preserve freedom except by making democracy more werful.

**estions:**

The advent of science and technology has increased the

A. Freedom of people.
B. Tyranny of the political parties.
C. Powers of the government.
D. Chances of economic inequality.

2. A spirit of moderation on the economically sound people would make the less privileged
   A. Unhappy with the rich people.
   B. More interested in freedom and security.
   C. Unhappy with their lot.
   D. Clamor less for absolute equality.

3. The growth of government is necessitated to
   A. Make the rich and the poor happy.
   B. Curb the accumulation of wealth in a few hands.
   C. Monitor science and technology.
   D. Deploy the police force wisely.

4. 'Era of Good Feelings' in the paragraph refers to
   A. Time of prosperity.
   B. Time of adversity.
   C. Time without government.
   D. Time of police atrocities.

5. "Tolerable state of balance' in the last sentence may mean
   A. An adequate level of police force.
   B. A reasonable level of economic equality.
   C. A reasonable amount of government interference.
   D. A reasonable check on economic power.

**Passage:**

Educational planning should aim at meeting the educational needs of the entire population of all age groups. While the traditional structure of education as a three layer hierarchy from the primary stage to the university represents the core, we should not overlook the periphery which is equally important. Under modern conditions, workers need to rewind, or renew their enthusiasm, or strike out in a new direction, or improve their skills as much as any university professor. The retired and the aged have their needs as well. Educational planning, in their words, should take care of the needs of everyone.

Our structures of education have been built up on the assumption that there is a terminal point to education. This basic defect has become all the more harmful today. A UNESCO report entitled 'Learning to Be' prepared by Edgar Faure and others in 1973 asserts that the education of children must prepare the future adult for various forms of self-learning. A viable education system of the future should consist of modules with different kinds of functions serving a diversity of constituents. And performance, not the period of study, should be the basis for credentials. The writing is already on the wall.

In view of the fact that the significance of a commitment of lifelong learning and lifetime education is being discussed only in recent years even in educationally advanced countries, the possibility of the idea becoming an integral part of educational thinking seems to be a far cry. For, to move in that direction means such more than some simple rearrangement of the present organization of education. But a good beginning can be made by developing Open University programs for older learners of different categories and introducing extension services in the conventional colleges and schools. Also these institutions should learn to cooperate with numerous community organizations such as libraries, museums, municipal recreational programs, health services etc.

**Questions:**

6. What is the main thrust of the author?
   A. Traditional systems should be strengthened.
   B. Formal education is more important than non-formal.
   C. One should never cease to learn.
   D. It is impossible to meet the needs of everyone.

7. Which of the following best describes the purpose of the author?
   A. To criticize the present educational system.
   B. To strengthen the present educational practices.
   C. To support non-conventional educational organizations.
   D. To present a pragmatic point of view.

8. According to the passage, the present education structures assume which of the following?
   A. All people can be educated as per their needs.
   B. Present educational planning is very much practical.
   C. Education is a onetime process.
   D. Simple rearrangement of the present educational system is a must.

9. What should be the major characteristic of the future educational system?
   A. Different modules with the same function.
   B. Same module for different groups.
   C. No modules but standard compulsory program for all.
   D. None of these.

10. According to the author, educational plan should attempt to
   A. Train the people at the core.
   B. Encourage conventional schools and colleges.
   C. Decide a terminal point to education.
   D. Fulfill the educational needs of everyone.

11. According to the author, what measures should Open University adopt to meet modern conditions?
   A. Develop various programs for adult learners.
   B. Open more colleges on traditional lines.
   C. Cater to the needs of those who represent 'core'
   D. Primary education should be under the control of open universities.

12. According to the author, what should be the basis for awarding credentials?
   A. Duration of the course.
   B. Competence of the course teachers.
   C. Diversity of the topics covered.
   D. Real grasp of matter or skill.

13. Which of the following is not true in the context of the given passage?
   A. Lifelong learning is a recent concept.
   B. Workers' knowledge and skills also need to be updated constantly.
   C. 'Learning to Be' defends that there is a terminal point to education.
   D. Schools and colleges should open extension services.

14. According to the author, the concept of 'lifetime education' is
   A. As old as traditional education.
   B. Still in formative stages.
   C. In vogue in advanced countries.
   D. Not practical.

15. Integrating the concepts of lifelong learning with the educational structure would imply
   A. Closing down conventional schools and colleges.
   B. Longer durations for all formal courses.
   C. Simple rearrangement of present educational organizations.
   D. More weight for actual performance than real understanding.

16. In the context of the passage, what is the meaning of the sentence 'The writing is already on the wall'?
   A. Everything is uncertain now-a-days.
   B. Changes have already taken place.
   C. The signs of change are already visible.
   D. You cannot change the future.

17. Which of the following is most nearly the same in meaning as the word 'meeting' as used in the passage?
   A. Approaching.
   B. Contacting.
   C. Introducing.
   D. Satisfying

18. Which of the following is most opposite in meaning to the word 'integral' as used in the passage?
   A. Essential
   B. Independent
   C. Major
   D. Minor

19. Which of the following is most opposite in meaning to the phrase 'a far cry' as used in the passage?
   A. A reality
   B. A theoretical suggestion
   C. Very funny
   D. Next to impossible

**Answers of the Questions**

| Answers | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. | C | 2. | D | 3. | A | 4. | A | 5. | C |
| 6. | C | 7. | D | 8. | C | 9. | D | 10. | D |
| 11. | A | 12. | D | 13. | C | 14. | D | 15. | C |
| 16. | C | 17. | D | 18. | B | 19. | A | | |

## BRAIN BUSTERS

**Directions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer for each question. Answer all questions following a passage on the basis of what is stated or implied in that passage.

**Answer and explanation of each question has been given in the Explanation Section at the end of the exercise.**

### Passage:

A great deal of discussion continues as to the real extent of global environmental degradation and its implications. What few people challenge however is that the renewable natural resources of developing countries are today subject to stresses of unprecedented magnitude. These pressures are brought about, in part, by increased population and the quest for an ever-expanding food supply. Because the health, nutrition, and general well-being of the poor majority are directly dependent on the integrity and productivity of their natural resources, the capability of governments to manage them effectively over the long term becomes of paramount importance.

Developing countries are becoming more aware of the ways in which present and future economic development must build upon a sound and sustainable natural resource base. Some are looking at our long tradition in environmental protection and are receptive to US assistance, which recognizes the uniqueness of the social and ecological systems in these tropical countries. Developing countries recognize the need to improve their capability to analyze issues and their own natural resource management. In February 1981, for example, AID funded a national Academy of Sciences panel to advise Nepal on their severe natural resource degradation problems. Some countries such as Senegal, India, Indonesia and Thailand, are now including conservation concerns in their economic development planning process.

Because so many governments of developing nations have recognized the importance of these issues, the need today is not merely one of raising additional consciousness, but for carefully designed and sharply focused activities aimed at management regimes that are essential to the achievement of sustained development.

### Questions:

1. Some of the developing countries of Asia and Africa have
   A. Formulated very ambitious plans of protecting habitat in the region.
   B. Laid a great stress on the conservation of natural resources in their educational endeavor.
   C. Carefully dovetailed environmental conservation with the overall strategy of planned economic development.
   D. Sought the help of US experts in solving the problem of environmental degradation.

2. Technical know-how developed in the USA
   A. Cannot be easily assimilated by the technocrats of the developing countries.
   B. Can be properly utilized on the basis of developing countries being able to launch an in-depth study of their specific problems.
   C. Can be easily borrowed by the developing countries to solve the problem of environmental degradation.

D. Can be very effective in solving the problem of resource management in tropical countries.

3. There has been a pronounced deterioration of habitat all over the globe because of
   A. Rigorous operation of the Malthusian principle
   B. Unprecedented urbanization and dislocation of self-contained rural communities.
   C. Optimum degree of industrialization in the developing countries.
   D. Large scale deforestation and desertification.

4. The poor people of the developing world can lead a happy and contented life if
   A. There is a North-South dialogue and aid flows freely to the developing world.
   B. Industries based on agriculture are widely developed.
   C. Economic development takes place within the ambit of conservation of natural resources.
   D. There is an assured supply of food and medical care.

5. How much environmental pollution has taken place in the developing and the developed world?
   A. There has been a marginal pollution of the environment in the developed world and extensive damage in the developing world.
   B. There has been a considerable pollution of the environment all over the globe.
   C. There has been an extensive environmental degradation both in the developed and the developing world.
   D. The environmental pollution that has taken place all over the globe continues to be a matter of speculation and enquiry.

| Answers | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. | C | 2. | B | 3. | A | 4. | C | 5. | D |

## Answers and Explanations

| Explanations | | |
|---|---|---|
| 1 | C | Start of the second part of the passage states "Developing countries are becoming more aware of the ways in which present and future economic development must build upon a sound and sustainable natural resource base", hence the answer is (C) |
| 2 | B | The sentence "Developing countries recognize the need to improve their capability to analyze issues and their own natural resource management" in the middle of the passage gives the right answer choice (B). |
| 3 | A | Malthusian principle relates the human population and the earth's natural resources. The main problem of the developing countries described in the passage is the inefficient large-scale use of natural resources; hence, they are applying Malthusian Principle. |
| 4 | C | The last part "Because so many governments of developing nations have recognized the importance of these issues, the need today is not merely one of raising additional consciousness, but for carefully designed and sharply focused activities aimed at management regimes that are essential to the achievement of sustained development." Of the passage leads to the right answer (C ). |
| 5 | D | First line of the passage indicates the issue under discussion is a global problem. |

**Passage:**

The past decade has upset many preconceptions above development and this, more than anything else, makes it difficult to be overly definite about what the next decade has in store. However, there are a few things that one can assert with some confidence. First, education, health, and productive employment are crucial both for growth and for equity. We have tended to assume that all of these are the consequences of rapid economic growth and that only growth can generate the resources required for these purposes. However, increasingly, it appears that these are better seen as the causes rather than as consequences of development. Virtually every case of successful development involves a prior improvement in literacy, technical skills, health status, and access to productive work.

Second, technological competence is the most important resource endowment and it explains a far larger proportion of growth in output and trade than more conventional factors like natural resources or capital accumulation. The competence required is not just in research. In fact technological dynamism in the factory and the farm is more important than the presence of large research establishment.

Third, the environmental imperative can no longer be ignored. Today, as an international issue, it is second only to disarmament. Nationally, the developmental consequences of environmental neglect are increasingly obvious.

In the Pakistani context, there are at least two further factors, which reinforce the above propositions. The first is population growth. Given the pace of expansion of the population and the workforce, human resource development acquires an added urgency. Population growth is also one, but not necessarily the most important factor, which underlines environmental stress in rural and urban areas. The second factor is that as a large country we cannot carve out an independent positioning the global system without building up a substantial capacity for self-reliant growth. The acquisition of technical competence is crucial for this purpose.

Until now, we have tended to treat human resource development, technology issues and environment as subsidiary to the main task of planning. The thrust has been on: quantitative expansion of infrastructure and production with a focus on production targets like tons of steel, kWh of electricity etc., capacity targets like road length, rail kilometer age; and coverage targets like number of schools and students, number of villages electrified etcetera, catching up with known technologies –Fuller use of natural resources -Maximum mobilization of financial resources.

1. What seems to be the purpose of the author in writing this passage?
   A. To appreciate the steps taken by our Government in the past and doubts about the future.
   B. To show how the policy makers have failed.
   C. A review of world affairs with special emphasis on developed countries.
   D. Review of the past with a view to evolve positive directions for future.

2. According to the passage, we have so far placed more emphasis on which of the following?
   A. Optimum use of available natural resources.
   B. Increased number of basic facilities and meeting number targets.
   C. Maximum utilization of available finances
   D. Following known technologies.

3. According to the author, which of the following factors support and strengthen his point of view?

   A - Necessity of carrying out growth on the basis of our own strength.

   B - Increased emphasis on production and coverage targets?

   A. Only A
   B. Only B
   C. Either A or B
   D. Both A and B

4. According to the author, which of the following is a less important factor resulting in environmental stress in rural and urban areas?
   A. Increase in capital accumulation.
   B. Rapid economic growth.
   C. Rate of growth of population.
   D. Availability of productive employment.

5. According to the author, at the national level, with passage of time the effects of which of the following are being felt?
   A. Expansion of workforce of high quality.
   B. Lack of attention and action for protecting environmental wealth.
   C. Reduction in growth rate of population.
   D. Progressive degradation of technological competence in urban areas.

6. Which of the following statements is not true in the context of the passage?
   A. Optimum self reliance is the need of the day.
   B. We will have a bright future by only catching up known technologies.
   C. We have to now emphasize aspects of human resource development.
   D. Technological competence has to be given due priority over more conventional factors.

7. According to the author, which of the following cannot be viewed as cause of development?
   A. Betterment in population growth.
   B. Increase in underemployment.
   C. Speedy economic growth.
   D. Enhancement in technical skills.

8. What seems to be the approach of the author regarding the present status of research?

   A - He desires that more research establishments should come up.

   B - Application of new technologies in factories and field is more vital than setting up of research laboratories.

   A. Only A
   B. Only B
   C. Neither A nor B
   D. Both A and B

| swers | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | B | 2. | B | 3. | A | 4. | D | 5. | B |
| | B | 7. | B | 8. | B | 9. | | 10. | |

## swers and Explanations

| planations | |
|---|---|
| | B The author has discussed factors for development of the country and has suggested many dimensions, which are important. This indicates that the previous policies were not successful. |
| | B Last part of the passage gives the answer of the question. |
| | A In the last part of the passage the author point out that "so far we have given emphasis on numbers". His tone indicates that he wants more growth on our strength. |
| | D In the first part, the author says "Education, health, and productive employment are crucial both for growth and for equity. We have tended to assume that all of these are the consequences of rapid economic growth and that only growth can generate the resources required for these purposes. However, increasingly, it appears that these are better seen as the causes rather than as consequences of development. Virtually every case of successful development involves a prior improvement in literacy, technical skills, health status, and access to productive work". In the middle of the passage the author points out, "Given the pace of expansion of the population and the workforce, human resource development acquires an added urgency. Population growth is also one, but not necessarily the most important factor, which underlines environmental stress in rural and urban areas." This clearly gives the idea that the author believes the availability of productive employment is less important. |
| | B In the third factor the author says "Third, the environmental imperative can no longer be ignored. Today, as an international issue, it is second only to disarmament. Nationally, the developmental consequences of environmental neglect are increasingly obvious." The right answer choice is B. |
| | B In the middle of the passage, the author gives emphasis on research "The competence required is not just in research. In fact technological dynamism in the factory and the farm is more important than the presence of large research establishment." Hence, he believes that there are many other factors of growth as well. |
| | B From the third line of the passage, the author says "Education, health, and productive employment are crucial both for growth and for equity. We have tended to assume that all of these are the consequences of rapid economic growth and that only growth can generate the resources required for these purposes. However, increasingly, it appears that these are better seen as the causes rather than as consequences of development. Virtually every case of successful development involves a prior improvement in literacy, technical skills, health status, and access to productive work." which gives the right answer. |
| | B In the middle of the passage, the author gives clear idea about new technologies. "In fact technological dynamism in the factory and the farm is more important than the presence of large research establishment. The right answer is B. |

# IDIOMS

## Set-1

1. Blow one's top
   To loose one's temper, to become angry.
   The professor is notorious for having a hot temper; you never know when he might blow his top of.

2. A cock-and-bull story
   A fictitious and implausible story
   I knew he was lying as soon as I heard his ridiculous cock-and-bull story.

3. Find one's feet
   Adjust to a situation, become confident in a particular activity.
   Although she struggled at first, soon Sarah was able to find her feet and perform well at her new job.

4. Call it a night
   To end the day, to go to sleep.
   I have an extremely hectic day tomorrow so I will call it a night.

5. The tip of the iceberg
   A small part of a large and daunting problem
   Melting of the ice caps is just the tip of the iceberg, the effects of climate change are far more drastic than that.

6. Below par,
   Below average
   The team's performance has been below par this season.

7. From pillar to post,
   To move from one location to another in a meaningless way,
   It seems my whole life I've been moving from pillar to post without an ultimate goal in mind.

8. Hang up
   To suspend something on a hook or hanger, to cut a telephone call.
   Let me hang up your coat for you.

9. Turn someone in,
   To report someone to the police for criminal activity.
   Although she is a good friend of mine I had to turn her in once I found out about the robbery.

10. By and by
    Eventually,
    Hang in there by and by you will be able to take some time off and visit your family.

## Set-2

1. The teaming meanings
   To give a range of meanings
   There can be teaming meanings of this theory.

2. To kick the bucket
   To die
   Although the doctors tried their best to save his life in the end Ali had to kick the bucket.

3. To push to the walls
   To be in an extreme situation, to be out of options
   Ayesha was pushed to the walls; she had no other choice but to take up this job.

4. To read between the lines
   To look for implied meaning, to go beyond the literal meaning of the words
   Although she denies it but I could read between the lines that she is in need of money.

5. To be at daggers drawn
   To be angry, to be on the brink of violence
   Although they were best friends growing up since the incident both of them have their daggers drawn whenever they meet each other.

6. Throw down the gauntlet
   To present a challenge or issue
   Instead of retreating he threw down the gauntlet to his enemies.

7. To be Greek
   Not being able to understand or comprehend something
   The new computer software is so difficult that despite trying to learn it is all still Greek to me.

8. To stand on ceremony
   To behave in a formal manner
   All the soldiers had to stand on ceremony when the general came to visit.

9. From the horse's mouth
   Ayesha got robbed recently I heard it straight from the horse's mouth.

10. To carry the cross
    To deal with ones burdens themselves.
    Ali had to carry the cross of his disability throughout his life.

## Set-3

1. Taken aback
   To be shocked or surprised
   She was quite taken aback by her rude attitude at dinner.

2. Take after
   To resemble, to imitate
   He takes after his father; both of them are really fussy eaters.

3. Take for
   In regards to
   You must not take me for a fool. I know the work you do is illegal.

4. Take ill
   Become sick
   Both her kids took ill after playing in the rain.

5. Take off
   To remove
   You must take off your hat when you greet someone.

6. Take over
   To take control of the situation
   Half way through our flight the pilot had a sudden heart attack and the co-pilot had to take over the rest of the flight.

7. Take in
   To give shelter
   The family took in the three legged cat after seeing it outside their house.

8. Take to task
   To question someone, to scold someone
   The teacher took to task all the students responsible for throwing paint in the school lobby.

9. Take to one's heels
   To run away
   As soon as she saw the dog she took to her heels and went back inside her room.

10. Take with a pinch/grain of salt
    To not take someone's word seriously
    Given his past history of lying I'm going to take his words with a pinch of salt.

## Set-4

1. To kick the bucket
   To die
   Although the doctors tried their best to save his life in the end Ali had to kick the bucket.

2. Bolt from the blue
   An unexpected or sudden event
   Her expulsion from university came as a bolt form the blue.

3. Put your foot down
   To take a firm stand on an issue, to have the final say
   We will have Chinese food for dinner I have put my foot down on the matter.

4. Worth your salt
   To be respected by other people
   The president is worth her salt because she has kept all her campaign promises.

5. Down the drain
   To have something be wasted or lost
   All their effort when down the drain because of the storm.

6. Swan song
   A final achievement
   Who knew that race would be his swans song because after the accident he was not able to ride again.

7. Cheek by Jowl
   To be very close in distance
   The tenets were placed cheek by jowl due to lack of space.

8. In a nutshell
   The crux of a story, to say something in a concise way
   In a nutshell, we have to vacate this home in two days.

9. Give me five
   A congratulatory gesture
   I am so happy to hear about your new job, give me five.

## Set-5

1. Grist to the mill
   Something that can be made useful and profitable
   You can buy the extra pair of gloves but they will not bring any grist to the mill.

2. Set ones cap at
   To pursue someone
   From the moment she saw him at the party she had set her cap at him.

3. To draw the long bow
To exaggerate a tale or story
The actual encounter lasted only two minutes but she drew such a long bow of it that I was worried.

4. To send to the Coventry
To ostracize or ignore someone
Ever since everyone found out he was lying about his illness they have sent him to the Coventry.

5. Beer and Skittles
Amusement or enjoyment
Our time at the amusement park was all beer and skittles until Ayesha got sick.

6. The acid test
A test to prove someone or something is good
She passed the acids test when she fulfilled her promise to me.

7. A skeleton in the cupboard
To have a secret past that might damage a person's reputation
The crimes he has committed in his past are definitely a skeleton in the closet that will prevent him from running for office.

8. To discover a mares nest
Something believed to be a great discovery but turning out to be a delusion
Even after years of research all the team was able to discover was a mares nest because it did not stop the spread of the disease.

## Set-6

1. To keep ones nose to the grindstone
To work hard and diligently
My sister had always wanted to be an astronaut so she kept her nose to the grindstone and finally achieved her dream.

2. Throw someone for a loop
To knock someone down, to surprise someone
When the match started the more famous boxer was easily able to throw the other one for a loop.

3. Letter perfect
To be able to repeat or write something precisely and perfectly
She gave a letter perfect speech at the convocation.

4. Off the wall
To be unconventional or exceptional
The drama clubs performance at the play was off the wall.

5. Out to lunch
Not to be fully in control of ones senses
He was completely out of touch after the robbery and couldn't answer any of the policies questions.

6. Salt something away
To store or reserve something
You better salt away those last few chocolate bars because we don't know how long we will be stuck in the storm.

7. Take someone to the cleaners
To cheat someone out of their money
The store took you to the cleaners because these items cost far less than what you paid for them.

8. Wear the pants in the family
To be the authority
Our grandmother wears the pants in this family so if she has said we can't go then that's the final verdict

## Set-7

1. Twiddle with
To play negligently with something
He has a bad habit of twiddling with his food instead of eating it.

2. Vamp up
To improve something
The company vamped up our car so that you can barely recognize it

3. Whittle away
To cut something in small portions
She kept whittling away at her eraser until nothing was left.

4. Winkle out
To pry something away, to remove
Although he denied it but I was able to winkle out the truth from him.

5. Give someone the bum's rush
To be removed forcibly
The family was given the bum's rush from the airplane before the flight.

6. Loom large
To appear big
His debt seemed to loom larger with every passing day.

7. Besetting sin
A habitual sin
Lying has become such a besetting sin of hers that it's hard to believe anything she says now.

8. To hang fire
To delay something
Ali kept hanging fire on his payment so the booking got cancelled.

## Set-8

1. To put the lid on
To suppress something
She kept the lid on about her pregnancy for as long as she could.

2. Flavor of the month
To be popular for a short period of time
Although she's the flavor of the month in a few days someone else will come along who can sing better.

3. Zero hours
A specific time when something important will take place
The media had been waiting zero hours for the Supreme Court judgment on the high profile case.

4. Gloom and doom
To create a feeling of despair and sadness
Looking at her you would think all is gloom and doom but I think her result is fine.

5. To pig out
To eat as if one is extremely hungry in a ravenous way
I have been fasting all day so I can't wait to pig out when the food arrives.

6. Bag people
A person involved in small scale work
Ever since he left his job he has been a bag person working on a day to day basis.

7. Compassion fatigue
Lack of empathy towards public calls for charity
The new president claims he has compassion fatigue and has refused to support any local or national charity.

8. No matter
Something that is not of significance
No matter if you weren't able to pick up ice from the store we can make do without it

## Set-9

1. Blow one's top
To loose one's temper, to become angry.
The professor is notorious for having a hot temper, you never know when he might blow his top of.

2. A cock-and-bull story
A fictitious and implausible story
I knew he was lying as soon as I heard his ridiculous cock-and-bull story.

3. Find one's feet
Adjust to a situation, become confident in a particular activity.
Although she struggled at first, soon Sarah was able to find her feet and perform well at her new job.

4. Call it a night
To end the day, to go to sleep.
I have an extremely hectic day tomorrow so I will call it a night.

5. The tip of the iceberg
A small part of a large and daunting problem.
Melting of the ice caps is just the tip of the iceberg, the effects of climate change are far more drastic than that.

6. Below par,
Below average
The team's performance has been below par this season.

7. From pillar to post,
To move from one location to another in a meaningless way,
It seems my whole life I've been moving from pillar to post without an ultimate goal in mind.

8. Hang up
To suspend something on a hook or hanger, to cut a telephone call.
Let me hang up your coat for you.

9. Turn someone in,
To report someone to the police for criminal activity.
Although she is a good friend of mine I had to turn her in once I found out about the robbery.

10. By and by

Eventually,
Hang in there by and by you will be able to take some time off and visit your family.

## Set-10

1. Leave in the lurch
To abandon someone during a time of need
As soon as my friend saw the dog she left me in the lurch and ran away.

2. Hard and fast
Something permanently defined, concert
It is a hard and fast rule in our school that students cannot cheat.

3. Weather the storm
Endure a difficult time
You have weathered the storm now your illness is receding.

4. Bear the Brunt
To bear the worst of a bad situation
The poor population of the country will have to bear the brunt of recent inflation.

5. Meet halfway
To compromise, to concede to half of someone else's demands
The trade unionists and managers met halfway to resolve the issues and satisfy all parties.

6. Turncoat
Traitor
That man was a turncoat because he pretended to care about our cause but when the time came to mobilize he backed out.

7. Where the shoe pinches
The point of much grief and trouble
Where the shoe pinches the most is that I thought of her as a true friend and despite that she betrayed me.

# PROVERBS

A

- A bad excuse is better than none
- A bad penny always turns u
- A bad workman blames his tools.
- A bird in the hand is worth two in the bush.
- A cat may look at a king
- A chain is only as strong as its weakest link
- A dog is a man's best friend.
- A fool and his money are soon parted
- A friend in need (is a friend indeed)
- A friend to everyone is a friend to no one.
- A journey of a thousand miles begins with a single step
- A little learning is a dangerous thing
- A leopard cannot change its spots.
- A mill cannot grind with the water that is past.
- A miss is as good as a mile
- A new language is a new life. Persian proverb
- A penny saved is a penny earned.
- A picture is worth a thousand words
- A rising tide lifts all boats
- A rolling stone gathers no moss
- A stitch in time (saves nine)
- A watched man never plays
- A watched pot/kettle never boils
- Absence makes the heart grow fonder
- Absolute power corrupts absolutely. John Dalberg-Acton, 1887
- Accidents will happen (in the best-regulated families).
- Actions speak louder than words.
- Adversity makes strange bedfellows
- All good things come to he who waits
- All good things must come to an end
- All hands on deck/to the pump
- All is grist that comes to the mill
- All roads lead to Rome,
- All that glitters/glitters is not gold,
- All the world loves a lover
- All things come to those who wait
- All things must pass
- All work and no play makes Jack a dull boy
- All you need is love
- All is fair in love and war
- All is for the best in the best of all possible worlds
- All's well that ends well
- An apple a day keeps the doctor away
- An army marches on its stomach. Napoleon Bonaparte (1769–1821), military leader and Emperor of France
- An eye for an eye makes the whole world blind. Mahatma Gandhi (1869–1948), leader of the Indian independence movement
- An Englishman's home is his castle/A man's home is his castle
- Another day, another dollar.
- An ounce of prevention is worth a pound of cure
- Any port in a storm
- Any publicity is good publicity
- April showers bring forth May flowers
- As you make your bed, so you must lie upon it
- As you sow so shall you reap
- Ask a silly question and you will get a silly answer
- Ask my companion if I be a thief
- Ask no questions and hear no lies
- Attack is the best form of defense

B

- Bad news travels fast
- Barking dogs seldom bite
- Beauty is in the eye of the beholder
- Beauty is only skin deep
- Beggars can't be choosers
- Behind every great man, there is a great woman
- Better late than never
- Better safe than sorry
- Be yourself
- Better the Devil you know (than the Devil you do not)
- Better to have loved and lost than never to have loved at all
- Better to light one candle than to curse the darkness
- Better to remain silent and be thought a fool than to speak and remove all doubt
- Better wear out than rust out.
- Beware of Greeks bearing gifts. Trojan War, Virgil in the Aeneid
- Big fish eat little fish
- Birds of a feather (flock together)
- Blood is thicker than water
- Born with a silver spoon in one's mouth
- Boys will be boys
- Brevity is the soul of wit. William Shakespeare
- Business before pleasure

C

- Caesar's wife must be above suspicion
- Careless talk costs lives
- Charity begins at home
- Cheats never prosper
- Cheese, wine, and friends must be old to be good.
- Children should be seen and not heard

- Christmas comes but once a year
- Cleanliness is next to godliness
- Clothes make the man
- Coffee and love taste best when hot. Ethiopian proverb
- Cold hands, warm heart
- Comparisons are odious
- Count your blessings
- Courage is the measure of a Man, Beauty is the measure of a Woman
- Cowards may die many times before their death
- Crime does not pay
- Cross the stream where it is shallowest
- Cut your coat according to your cloth
- Curiosity killed the cat

D

- Dead men tell no tales
- Devil take the hindmost
- Discretion is the better part of valour
- Do as I say, not as I do
- Do as you would be done by
- Do unto others as you would have them do unto you
- Do not bite the hand that feeds you
- Do not burn your bridges behind you
- Do not cast your pearls before swine
- Do not cry over spilled milk
- Do not change horses in midstream
- Do not count your chickens before they are hatched
- Do not cross the bridge till you come to it
- Do not cut off your nose to spite your face
- Do not fish for a shark with your hands, fish for hands with a shark.
- Do not judge a book by its cover
- Do not keep a dog and bark yourself
- Do not let the bastards grind you down
- Do not let the grass grow beneath (one's) feet
- Do not look a gift horse in the mouth
- Do not make a mountain out of a mole hill
- Do not meet troubles half-way
- Do not put all your eggs in one basket
- Do not put the cart before the horse
- Do not put too many irons in the fire
- Do not put new wine into old bottles
- Do not put off until tomorrow what you can do today
- Do not rock the boat
- Do not shut/lock the stable door after the horse has bolted
- Do not spend it all in one place
- Do not spoil the ship for a ha'porth of tar
- Do not throw pearls to swine
- Do not teach your Grandmother to suck eggs
- Do not throw the baby out with the bathwater
- Do not try to walk before you can crawl
- Do not upset the apple-cart
- Do not wash your dirty linen in public
- Do not sympathize with those who can not empathize
- Do unto others as you would have them do unto you. Often referred to as the Golden Rule
- Doubt is the beginning, not the end, of wisdom

E

- Early to bed and early to rise makes a man healthy, wealthy and wise. Benjamin Franklin (1706–1790), polymath and Founding Father of the United States
- Easier said than done
- East is east, and west is west (and never the twain shall meet)
- East, west, home is best,
- Easy come, easy go
- Early marriage, earlier pregnant
- Eat breakfast like a king, lunch like a prince and dinner like a pauper
- Eat, drink and be merry, (for tomorrow we die)
- Empty vessels make the most noise
- Enough is as good as a feast
- Even a worm will turn
- Even from a foe a man may learn wisdom.
- Every cloud has a silver lining
- Every dog has his day
- Every Jack has his Jill
- Every little bit helps
- Every man for himself (and the Devil take the hindmost)
- Every man has his price
- Every picture tells a story
- Every stick has two ends
- Everybody wants to go to heaven but nobody wants to die
- Everyone has their price
- Everything comes to those who wait
- Every tide has its ebb

F

- Failing to plan is planning to fail
- Faint heart never won fair lady (Scott),
- Fair exchange is no robbery
- Faith will move mountains
- Fall seven times, stand up eight.
- False friends are worse than open enemies.
- Fake it til' you make it.
- Familiarity breeds contempt
- Feed a cold and starve a fever
- Fight fire with fire
- Fine feathers make fine birds
- Finders keepers (losers weepers)

- Fine words butter no parsnips
- First come, first served
- First impressions are the most lasting
- First things first
- Fish always rots from the head downwards
- Fish and guests smell after three days
- Flattery will get you nowhere
- Fools rush in (where angels fear to tread)
- For want of a nail the shoe was lost; for want of a shoe the horse was lost; and for want of a horse the man was lost
- Forewarned is forearmed
- Fortune favours the bold/brave
- Free is for me
- Fretting cares make grey hair
- From the sublime to the ridiculous (is only a step)

G

- Genius is an infinite capacity for taking pains
- Give a dog a bad name and hang him
- Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime
- Give a man rope enough and he will hang himself
- Give credit where credit is due
- Give him an inch and he will take a mile
- Give the devil his/her due
- God helps those who help themselves
- Good fences make good neighbours
- Good talk saves the food
- Good things come to those who wait
- Great minds think alike

H

- Half a loaf is better than no bread
- Handsome is as handsome does
- Hard cases make bad law
- Hard work never did anyone any harm
- Haste makes waste
- He that goes a-borrowing, goes a-sorrowing
- He who can, does; he who cannot, teaches
- He who hesitates is lost
- He who laughs last laughs longest
- He who lives by the sword, dies by the sword
- He who loves the world as his body may be entrusted with the empire. Lao Tzu, Chinese philosopher (604 BC – c. 531 BC)
- He who makes a beast out of himself gets rid of the pain of being a man
- He who pays the piper calls the tune
- He who knows does not speak. He who speaks does not know. Lao Tzu, Chinese philosopher (604 BC – c. 531 BC)
- He who sups with the Devil should have a long spoon
- Hell hath no fury like a woman scorned
- Heav'n has no Rage, like Love to Hatred turn'd, Nor Hell a Fury, like a Woman scorn'd. William Congreve, The Mourning Bride, Act III scene viii
- Hindsight is always twenty-twenty
- History repeats itself
- Home is where the heart is
- Honesty is the best policy
- Hope for the best, and prepare for the worst.
- Hope springs eternal
- Horse kicking a water stand Horses for courses
- Hunger never knows the taste, sleep never knows the comfort
- [[in the poem ,the speaker is talking to

I

- If anything can go wrong, it will. Also referred to as Murphy's Law
- If a job is worth doing, it is worth doing well
- If at first you do not succeed, try, try again
- If God had meant us to fly, he would have given us wings
- If ifs and ands were pots and pans, there would be no work for tinkers
- If it ain't broke, don't fix it.
- If it were not for hope the heart would break.
- If it were a snake, it would have bit you.
- If the shoe fits, wear it
- If the mountain will not come to Mohammed, then Mohammed must go to the mountain
- If wealth is lost, nothing is lost. If health is lost, something is lost. If character is lost, everything is lost.
- If wishes were horses, beggars would ride
- If you're growing in age, then you're nearing to the graveyard
- If you cannot be good, be careful
- If you cannot beat them, join them
- If you cannot live longer, live deeper.
- If you cannot stand the heat, get out of the kitchen
- If you give a mouse a cookie, he'll always ask for a glass of milk
- If you think that you know everything, then you're a Jack ass
- If you lie down with dogs, you will get up with fleas
- If you pay peanuts, you get monkeys
- If you play with fire, you will get burned.
- If you steal from one author, it is plagiarism; if you steal from many, it is research. Wilson Mizner (1876–1933), American writer and entrepreneur
- If you want a thing done well, do it yourself
- If you have never seen the bottom of the tree, you cannot know how tall it stands
- If you must dance with the Devil, you might as well know his favorite song. (H. Anthony Ribadeneira)

- If you've got it, flaunt it
- Ignorance is bliss
- Imitation is the sincerest form of flattery
- In for a penny, in for a pound
- (March comes) in like a lion, (and goes) out like a lamb
- In the kingdom of the blind, the one eyed man is king
- In the midst of life, we are in death
- Into every life a little rain must fall
- It ain't over till/until it's over
- It ain't over till the fat lady sings
- It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.
- It goes without saying
- It is a small world
- It is all grist to the mill
- It is an ill wind (that blows no one any good)
- It is best to be on the safe side
- It is better to be smarter than you appear than to appear smarter than you are.
- It is better to give than to receive
- It is better to have loved and lost than never to have loved at all
- It is better to cultivate a Land with two Bulls, rather working under Boss who never gives Wage when asked
- It is better to light a candle than curse the darkness
- It is better to travel hopefully than to arrive
- It is easy to be wise after the event
- It is like juggling sand (Ian Murray)
- It is never too late
- It is no use crying over spilt milk
- It is no use locking the stable door after the horse has bolted
- It is not enough to learn how to ride, you must also learn how to fall.
- It is on
- It is the early bird that gets the worm
- It is the empty can that makes the most noise
- It is the squeaky wheel that gets the grease
- It is what it is
- It needs a hundred lies to cover a single lie
- It never rains but it pours
- It takes a thief to catch a thief
- It takes a whole village to raise a child
- It takes all sorts to make a world
- It takes one to know one
- It takes two to tango
- I'm going to have to give you the pink slip
- It will come back and haunt you
- It will be the same a hundred years hence.
- Islands depend on reeds, just as reeds depend on islands.

J

- Jack of all trades, master of none/one/some
- Judge not, that ye be not judged

K

- Keep your chin up
- Keep your friends close and your enemies closer.
- Keep your powder dry. Valentine Blacker, 1834 from Oliver's Advice
- Kill the chicken to scare the monkey.
- Kill the goose that lays the golden egg(s).
- Kill two birds with one stone.
- Kindness in words creates confidence. Kindness in thinking creates profoundness. Kindness in giving creates love. Lao Tzu, Chinese philosopher (604 BC – c. 531 BC)
- Knock on (or touch) wood
- Know which side (one's) bread is buttered (on)
- Knowledge is power, guard it well.

L

- A language is a dialect with an army and navy
- The last drop makes the cup run over
- Laugh before breakfast, cry before supper.
- Laugh and the world laughs with you, weep and you weep alone
- Laughter is the best medicine
- Late lunch makes the day go faster.
- Learn a language, and you will avoid a war. Arab proverb
- Least said, soonest mended
- Less is more
- Let bygones be bygones
- Let not the sun go down on your wrath
- Let sleeping dogs lie
- Let the buyer beware
- Let the cat out of the bag
- Let the dead bury the dead (N.T.)
- Let the punishment fit the crime
- Let well alone
- Let your hair down.
- Life begins at forty
- Life is too short not to do something that matters.
- Life is not all beer and skittles
- Life is what you make it
- Lightning never strikes twice in the same place
- Like father, like son
- Little pitchers have big ears
- Little strokes fell great oaks
- Little things please little minds
- Live and let live
- Live for today, for tomorrow never comes

- Live to fight another day. This saying comes from an English proverbial rhyme, "He who fights and runs away, may live to fight another day".
- Loose lips sink ships
- Look before you leap
- Love is blind. The Two Gentlemen of Verona, Act II, Scene 1 (1591)
- Love of money is the root of all evil.
- Love makes the world go around
- Love will find a way

M

- Make hay while the sun shines
- Make love not war
- Man does not live by bread alone
- Manners maketh man
- Many a little makes a mickle
- Many a mickle makes a muckle
- Many a true word is spoken in jest
- Many hands make light work
- March comes in like a lion and goes out like a lamb
- Marriages are made in heaven
- Marry in haste, repent at leisure
- Memory is the treasure of the mind
- Men are blind in their own cause. Heywood Broun (1888–1939), American journalist
- Men get spoiled by staying; Women get spoiled by wandering
- Might is right
- Might makes right
- Mighty oaks from little acorns grow
- Milking the bull
- Misery loves company
- Moderation in all things
- Monday's child is fair of face, Tuesday's child is full of grace, Wednesday's child is full of woe, Thursday's child has far to go, Friday's child is loving and giving, Saturday's child works hard for its living, and a child that is born on the Sabbath day is fair and wise and good and gay.
- Money does not grow on trees
- Money earned by deceit, goes by deceit
- Money is not everything
- Money demands care, you abuse it and it disappears. Rashida Costa
- Money makes the world go around
- Money talks
- Money makes many things, but also makes devil dance
- More haste, less speed
- Mud sticks
- Music has charms to soothe the savage breast

N

- Nature abhors a vacuum
- Necessity is the mother of invention
- Needs must when the devil drives
- Never cast a clout until May be out
- Never give advice unless asked.
- Never give a sucker an even break
- Never judge a book by its cover
- Never let the sun go down on your anger
- Never let the truth get in the way of a good story
- Never look a gift horse in the mouth
- Never put off until tomorrow what you can do today
- Never reveal a man's wage, and woman's age
- Never speak ill of the dead
- Never say die
- Never say never
- Never tell tales out of school
- Never too old to learn.
- Nine tailors make a man,
- No guts, no glory
- No man can serve two masters
- No man is an island
- No names, no pack-drill
- No news is good news
- No one can make you feel inferior without your consent
- No pain, no gain
- No rest for the wicked
- Not all those who wander are lost "All that is gold does not glitter" J.R.R. Tolkien (1954)
- Not happy, Jan!
- Nothing is certain but death and taxes
- Nothing succeeds like success,
- Nothing ventured, nothing gained

O

- Oil and water do not mix
- Of course my horse (trademarked by Guadalupe Schmidt-Mumm)
- Old soldiers never die, (they simply/just fade away). From a soldiers' folklore song, the phrase was most notably used by U.S. General Douglas MacArthur (1880–1964) in his farewell address to the Congress.
- Once a(n) _, always a(n) _
- Once bitten, twice shy
- One good turn deserves another
- One half of the world does not know how the other half lives
- One hand washes the other
- One kind word can warm three winter months
- One man's meat is another man's poison
- One man's trash is another man's treasure
- One might as well be hanged for a sheep as a lamb

- One might as well throw water into the sea as to do a kindness to rogues
- One law for the rich and another for the poor
- One swallow does not make a summer
- One who believes in Sword, dies by the Sword
- One who speaks only one language is one person, but one who speaks two languages is two people. Turkish Proverb
- One year's seeding makes seven years weeding
- Only fools and horses work
- Open confession is good for the soul.
- Opportunity never knocks twice at any man's door
- Other times other manners.
- Out of sight, out of mind
- Out of the frying pan and into the fire
- Out of the mouths of babes (and sucklings)
- Over greedy man, over wrathful woman will never flourish

P

- Parsley seed goes nine times to the Devil
- Patience is a virtue
- Pearls of wisdom
- Penny wise and pound foolish
- Penny, Penny. Makes many.
- People who live in glass houses shouldn't throw stones
- Physician, heal thyself
- Possession is nine-tenths of the law
- Power corrupts; absolute power corrupts absolutely
- Practice makes perfect
- Practice what you preach
- Preaching to the choir
- Prevention is better than cure
- Pride comes/goes before a fall (O.T.),
- Procrastination is the thief of time
- Put your best foot forward
- Put your money where your mouth is

R

- Red sky at night shepherds delight; red sky in the morning, shepherds warning
- Respect is not given, it is earned.
- Revenge is a dish best served cold
- Revenge is sweet
- Rome was not built in a day
- Right or wrong, my country
- Rules were made to be broken.

S

- See a penny and pick it up, all the day you will have good luck; see a penny and let it lay, bad luck you will have all day
- See no evil, hear no evil, speak no evil
- Seeing is believing
- Seek and ye shall find
- Set a thief to catch a thief
- Shiny are the distant hills
- Shrouds have no pockets
- (Speech is silver but) Silence is golden
- Slow and steady wins the race
- Slow but sure
- Softly, softly, catchee monkey
- Some are more equal than others
- Sometimes we are the students. Sometimes we are the master. And sometimes we are merely the lesson – Jacalyn Smith
- Spare the rod and spoil the child
- Speak as you find
- Speak softly and carry a big stick
- Sticks and stones may break my bones, but words will never hurt me
- Still waters run deep
- Strike while the iron is hot
- Stupid is as stupid does
- Success has many fathers, while failure is an orphan
- Speak of the devil and he shall/is sure/will appear
- (A) swarm in May is worth a load of hay; a swarm in June is worth a silver spoon; but a swarm in July is not worth a fly

T

- Take care of the pennies, and the pounds will take care of themselves
- Talk is cheap
- Talk of the Devil, and he is bound to appear
- Talk of Angels, and hear the flutter of their wings
- Tell me who your friends are, and I'll tell you who you are
- Tell the truth and shame the Devil (Shakespeare, Henry IV),
- The age of miracles is past
- The apple doesn't fall/never falls far from the tree
- The best defence is a good offence
- The best-laid schemes of mice and men often go awry
- The best things in life are free
- The bigger they are, the harder they fall
- The boy is father to the man
- The bread never falls but on its buttered side
- The child is the father of the man
- The cobbler always wears the worst shoes
- The course of true love never did run smooth
- The customer is always right
- The darkest hour is just before the dawn
- The Devil finds work for idle hands to do
- The Devil looks after his own
- The die is cast
- The early bird catches the worm
- The end justifies the means

- The enemy of my enemy is my friend
- The exception which proves the rule
- The female of the species is more deadly than the male
- The good die young
- The grass is always greener (on the other side) (of the fence)
- The hand that rocks the cradle rules the world
- The husband is always the last to know
- The innocent seldom find an uncomfortable pillow. William Cowper, English poet (1731–1800)
- The labourer is worthy of his hire
- It is the last straw that breaks the camel's back
- The law is an ass. From English writer Charles Dickens' novel Oliver Twist
- The leopard does not change his spots
- The left hand doesn't know what the right hand is doing
- The light is on but nobody's home
- The longest day must have an end
- The longest journey starts with a single step
- The moon is made of green cheese
- The more the merrier
- The more things change, the more they stay the same
- The only disability in life is a bad attitude. Scott Hamilton
- The only way to understand a woman is to love her
- The pen is mightier than the sword
- The pot calling the kettle black
- The proof of the pudding is in the eating
- The road to Hell is paved with good intentions
- The shoemaker's son always goes barefoot
- The squeaky wheel gets the grease
- The streets are paved with gold
- The way to a man's heart is through his stomach
- The work praises the man.
- The worm will turn
- There ain't no such thing as a free lunch
- There are more ways of killing a cat than choking it with cream
- There are none so blind as those who will not see — attributed variously to Edmund Burke or George Santayana
- There are two sides to every question
- There but for the grace of God go I
- There is an exception to every rule
- There are always more fish in the sea
- There is honour among thieves
- There is many a good tune played on an old fiddle
- There is many a slip 'twixt cup and lip
- There is more than one way to skin a cat
- There is no accounting for tastes
- There is no fool like an old fool
- There's no need to wear a hair shirt
- There is no place like home
- There is no shame in not knowing; the shame lies in not finding out.
- There is no smoke without fire/Where there is smoke, there is fire
- There is no such thing as a free lunch
- There is no such thing as bad publicity
- There is no time like the present
- There are none so deaf as those who will not hear
- There's nowt so queer as folk
- There is one born every minute
- There is safety in numbers
- They that sow the wind shall reap the whirlwind
- Third time's a charm
- Those who do not learn from history are doomed to repeat it – George Santayana
- Those who live in glass houses shouldn't throw stones
- Those who know many languages live as many lives as the languages they know. Czech proverb
- Those who sleep with dogs will rise with fleas
- Time and tide wait for no man
- Time flies
- Time is a great healer
- Time is money
- (Only) time will tell
- 'Tis better to have loved and lost than never to have loved at all
- To be worn out is to be renewed. Lao Tzu, Chinese philosopher (604 BC – c. 531 BC)
- To each his own.
- To err is human, to forgive divine
- To learn a language is to have one more window from which to look at the world. Chinese proverb
- To the victor go the spoils
- To travel hopefully is a better thing than to arrive
- Tomorrow is another day
- Tomorrow never comes
- Too many cooks spoil the broth
- Too little, too late
- Too much of a good thing
- Truth is stranger than fiction
- Truth is more valuable if it takes you a few years to find it. Often attributed to French author Jules Renard (1864–1910)
- (The) truth will out
- Turn your face toward the sun and the shadows fall behind you.
- Two birds with one stone.
- Two can play at that game
- Two heads are better than one

- Two is company, but three is a crowd,
- Two wrongs (do not) make a right

U

- Uneasy lies the head that wears a crown[21]
- United we stand, divided we fall[22]
- Use it or lose it
- Ugly is as ugly does
- Up a creek without a paddle

V

- Variety is the spice of life. William Cowper, English poet (1731–1800)[23]
- Virtue is its own reward

W

- Walk softly but carry a big stick. 26th U.S. President Theodore Roosevelt, 1900 in letter relating an old African proverb[24]
- Walls have ears
- Walnuts and pears you plant for your heirs
- Waste not, want not
- Well begun is half done
- What does not kill me makes me stronger
- Well done is better than well said.
- What cannot be cured must be endured
- What goes around, comes around
- What goes up must come down
- What you lose on the swings you gain on the roundabouts
- What is sauce for the goose is sauce for the gander
- What the eye does not see (the heart does not grieve over.)
- When in Rome, (do as the Romans do). St. Ambrose 347AD[25]
- Whatever floats your boat
- When it rains it pours.
- When life gives you lemons, make lemonade[26]
- When the cat's away, the mice will play
- When the going gets tough, the tough get going
- When the oak is before the ash, then you will only get a splash; when the ash is before the oak, then you may expect a soak
- When three women gather, it becomes noisy.
- When you have seen one, you have seen them all
- What is learnt in the cradle lasts to the tombs.
- What the eye does not see, the heart does not grieve over
- Where there is a will there's a way
- Where there's muck there's brass
- Where there is life there is hope.
- Whether you think you can, or you think you can't, you're right.
- While there is life there is hope
- Who will bell the cat?
- Whom the Gods love die young
- Why keep a dog and bark yourself?
- With great responsibility comes great power
- Woman is the root of both good and evil
- Wonders will never cease
- Work expands so as to fill the time available
- Worrying never did anyone any good

Y

- You are never too old to learn
- You are what you eat
- You can have too much of a good thing
- You can lead a horse to water, but you cannot make it drink
- You can never/never can tell
- You cannot always get what you want
- You cannot have your cake and eat it too
- You cannot get blood out of a stone
- You cannot make a silk purse from a sow's ear
- You cannot make an omelette without breaking eggs
- You cannot make bricks without straw
- You cannot push a rope
- You cannot run with the hare and hunt with the hounds
- (You cannot) teach an old dog new tricks
- You cannot win them all
- You catch more flies with honey than with vinegar
- You pay your money and you take your choice
- Youth is wasted on the young
- You may/might as well be hanged/hung for a sheep as (for) a lamb
- You must have rocks in your head
- You scratch my back and I'll scratch yours
- You'll never get if you never go
- You've got to separate the wheat from the chaff
- You've made your bed and you must lie in/on it

Z

- Zeal without knowledge is fire without light.

# BASIC MATHEMATICS

Numbers, basic arithmetical concepts, and their applications are the main topics covered in this section. You'll find not only questions based on these concepts but also their applications in solving problems of average, ratios, proportions, and percentage on the test. Most of the students from non-math academic background often scared of the name Mathematics on the test.

## Numbers and their Properties

You are already familiar with numbers. Out of a variety of numbers in elementary and advanced mathematics, only a few are tested on the Test .

### Integers

All positive and negative whole numbers including zero are integers.

### Examples:

-349 , -4, -1 , 0 , 1, 4 , 77 , 183

Therefore, some integers are positive, some are negative, and the integer 0 is neither positive nor negative.

The difference between two consecutive integers is 1. If x is an integer then the next consecutive integer is x + 1.

### Sample Question:

The sum of three consecutive integers is 18. What is the smallest of the numbers?

### Solution:

x is the smallest integer, then next two consecutive integers are x + 1 and x + 2. The sum of these three numbers is

x + (x + 1) + (x + 2) = 18

3x + 3 = 18

3x = 15

x = 5

### Properties of Integers

- Sum or difference of integers is also an integer.
- Product (multiplication) of integers is also an integer.
- Division of one integer by another integer not necessarily yields an integer. If you divide 6 by 3, the result is 2. Which is an integer, but if 5 is divided by 6, the answer is 5/6, which is not an integer.

### Odd Integers

Any number that cannot be divided by 2 is called an odd integer; therefore {. . . , - 5, -3, -1, 1, 3; 5, . . .} represents the set of all odd integers.

### Examples:

3, 5, 7, 11, 33, 45 etc

### Properties of Odd Integers

- The difference between two consecutive odd numbers is 2.
- If x is an odd number then next odd number is x + 2. Next to x + 2 is x + 4.
- The sum of two odd integers is an even integer.
- Product of two odd integers is an odd integer.
- Division of an odd integer by another odd integer may not be an integer (5 ÷ 3 is not an integer).

### Even Integers

Any number that can be divided by 2 or Integers that are multiples of 2 are called even integers, namely

{. . . - 6, - 4, -2, 0, 2, 4, 6, . . .}.

### Example:

2, 4, 6, 80, 96, 110 etc

### Properties of Even Integers

- The difference between two even numbers is 2.
- If x is an even number then next even number is x + 2.
- Next to x + 2 is x + 4.
- The sum of even integers is an even integer.
- Product of two even integers is an even integer.
- Division of an even integer by another even integer may not be an even integer (6 ÷ 2 is not an even integer).

### Sample Question:

The sum of three even integers is 36. Find the smallest of the three.

### Solution:

x is the smallest integer, then next consecutive even integers are x + 2 and x + 4. According to given condition, their sum is:

x + (x + 2) + (x + 4) = 36

3x + 6 = 36

3x = 30

x = 10

### Prime Numbers

The number that can be divided by itself and by 1 only; there is no other factor of the number.

### Examples:

2, 3, 5, 7, 11, 13, 17, 19 etc.

- 2 is the only even Prime number.
- 1 is not a prime number.

### Properties of Prime Numbers

- Product of two prime numbers can never be a prime number. 3 × 7 = 21 which is not a prime number as it is divisible by 3 and 7.
- Sum (Addition) of two prime numbers may or may not be a prime number. 2 + 3 = 5, and 2, 3, and 5 all are prime numbers. 2 + 7 = 9, and 2 and 7 are prime numbers but their sum 9 is not a prime number.
- Difference of two prime numbers may or may not be a prime number. Difference of 5 and 3 is 2, which is a prime number. The difference of 9 and 5 is 4, which is not a prime number.

### Real Numbers

All numbers including integers and fractions (decimals) are real. In pure mathematics, real numbers have more detailed definition, but for test preparation, you can rely the definition given here:

### Note:

All numbers given on the test are **Real** unless otherwise stated.

### Properties of Real Numbers

- Infinite many numbers lies between any two real numbers. (0.011, 0.012, 0.013, ..... all lie between 0.01 and 0.02).
- Any real number divided by zero, results in an undetermined result.
- All numbers greater than zero are positive numbers.
- All numbers less than zero are negative numbers.
- Zero is neither positive nor negative.

### Absolute Value of a Number

The absolute value of a number is the number with only positive value. The symbol for absolute value is two enclosing vertical segments. The absolute value of -9 and +9 are written as |-9| and |+9| and both are equal to 9.

**How to Recognize Multiples of 2, 3, 4, 5, 6, 9, 10, and 12.**

- Number is multiple of 2 if: Last digit is even.
- Number is multiple of 3 if : Sum of digits is a multiple of 3.
- Number is multiple of 4 if: Last two digits are a multiple of 4.
- Number is multiple of 5 if: Last digit is 5 or 0.
- Number is multiple of 6 if: Sum of digits is a multiple of 3 and last digit is even.
- Number is multiple of 9 if: Sum of digits is a multiple of 9.
- Number is multiple of 10 if: Last digit is 0.
- Number is multiple of 12 if: Sum of digits is a multiple of 3 and last two digits are a multiple of four.

## Fractions and Decimals

A number lying between zero and 1 or between zero and -1 is a fraction or decimal. In other words, we deal numbers that have absolute value less than one as fraction or decimal.

## Fractions

A fraction is just another way of expressing division. The expression $\frac{12}{17}$ is exactly the same thing as 12 divided by 17.

$\frac{a}{b}$ is nothing more than a divided by b.

**In the fraction $\frac{x}{y}$, x is known as Numerator, and y is known as the denominator.**

The other important way to think of a fraction is as:

$$\frac{\text{Part}}{\text{Whole}}$$

The fraction $\frac{7}{10}$ can be thought as 7 parts out of a total of ten parts of an item (Number value).

## Positive Fractions

A number lying between zero and 1 is a positive fraction.

## Negative Fractions

A number lying between zero and -1 is a negative fraction.

## Sample Question:

**What part of an hour elapses between 3:25 PM to 3:37 PM.**

## Solution:

## Part:

Time elapses between 3:25 to 3:37 is 12 minutes.

## Whole:

One hour = 60 minutes

$$\frac{\text{Part}}{\text{Whole}}:$$

**Tip**

If the difference between numerator and denominator of one fraction is the same as the difference between the numerator and denominator of the other fraction, then the fraction with greater numerator is greater.

In case of $\frac{3}{4}, \frac{7}{8}$, the difference between 3 and 4 is same as difference between 7 and 8. Since 7 is greater than 3, so $\frac{7}{8}$ is greater fraction.

$$= \frac{12}{60} = \frac{1}{5}$$

## Answer:

$$= \frac{1}{5}$$

## Proper Fractions

If the Numerator is less than Denominator in a fraction, the fraction is called as proper fraction.

## Improper Fractions

If the Numerator is greater than Denominator in a fraction, the fraction is called as improper fraction.

## Mixed Fractions:

Mixed fraction is a combination of a whole number and a fraction. Like in $7\frac{2}{5}$ ; 7 is whole number and $\frac{2}{5}$ is the fraction.

## Common Factor

Common factor of two or more numbers is a number that divides these numbers.

## Example:

Common factor of 6 and 8 is 2, as 2 divides both 6 and 8.

## How to Find

Break down both numbers to their prime factors to see what they have in common. Then multiply the shared prime factors to find all common factors.

## Example:

What factors greater than 1 do 135 and 225 have in common?
First find the prime factors of 135 and 225.
$135 = 3 \times 3 \times 3 \times 5$, and $225 = 3 \times 3 \times 5 \times 5$. The number share $3 \times 3 \times 5$ in common. Thus, aside from 3 and 5, the remaining common factors can be found by multiplying 3, 3, and 5 in every possible combination: $3 \times 3 = 9$, $3 \times 5 = 15$, and $3 \times 3 \times 5 = 45$.

## Common Multiple

Common multiple of two or more numbers is a number that is divided by these numbers.

## Example:

Common multiple of 4 and 5 is 20, as both 4 and 5 divide 20 completely.

## How to Find

The product of the numbers is the easiest common multiple to find. If the two numbers have any factors in common, you can divide them out of the product to get a lower common multiple.

## Example:

What is the least common multiple of 28 and 42?
The product $28 \times 42 = 1{,}176$ is a common multiple, but not the least. $28 = 2 \times 2 \times 7$, and $42 = 2 \times 3 \times 7$. They share a 2 and a 7, so divide the product by 2 and then by 7. $1{,}176 \div 2 = 588$. $588 \div 7 = 84$. The least common multiple is 84.

# ADDING AND SUBTRACTING FRACTIONS

## Same Denominator

To add two or more fractions that have the same denominator, simply add up the numerators and put the sum over the common denominator.

**Example:**

$$\frac{1}{7}+\frac{5}{7}=\frac{(1+5)}{7}=\frac{6}{7}$$

Subtraction works exactly in the same way

$$\frac{6}{7}-\frac{2}{7}=\frac{(6-2)}{7}=\frac{4}{7};$$

## Different Denominators

Before you add or subtract two or more fractions with different denominators, you must give all of them the same denominator. To do this, multiply each fraction by a number that will give it a denominator in common with the others.

**Example:**

If you wanted to change $\frac{1}{2}$ into sixths, you could do the following:

$$\frac{1}{2}\times\frac{3}{3}=\frac{3}{6}$$

We haven't actually changed the value of the fraction, because we multiplied it by 1. The new fraction reduces to $\frac{1}{2}$.

If we wanted to add

$$\frac{1}{2}+\frac{2}{3}=\frac{1}{2}\times\frac{3}{3}+\frac{2}{3}\times\frac{2}{2}=\frac{3}{6}+\frac{4}{6}=\frac{7}{6}$$

## Multiplying Fractions

To multiply fractions, just multiply the numerators and put the product over the product of the denominators.

**Example:**

$$\frac{2}{3}\times\frac{4}{5}=\frac{8}{15}$$

## Reducing Fractions

When you add or multiply fractions, you often end up with a big fraction that is hard to work with. You can usually reduce such a fraction.

To reduce a fraction, find a factor of the numerator that is also a factor of the denominator, it saves time to find the biggest factor they have in common, but this isn't critical. You may just have to repeat the process a few times. When you find a common factor, cancel it. For example, $\frac{2}{3}\div\frac{3}{4}$ Get used to reducing all fractions (if they can be reduced) before you do any work with them. It saves a lot of time and prevents errors in calculation.

## Dividing Fractions

To divide one fraction by another, just invert the second (from left to right) fraction and multiply:

$\frac{2}{3}\div\frac{3}{4}$ is the same thing as $\frac{7}{2}$

## Fractions: Mixed To Improper

The Test sometimes gives you numbers that are mixtures of integers and fractions, for example, $3\frac{1}{2}$. It's easier to work with these numbers if you convert them into mixed fractions.

$3\frac{1}{2}$ would be converted like this:

Multiply 2 with 3 and add 1, this gives you the numerator of the resulting mixed fraction. The resulting mixed fraction is $\frac{7}{2}$.

## Comparing Fractions

In the course of a problem, you may have to compare two or more fractions and determine which is larger.

**Example:**

Compare $\frac{3}{4},\frac{7}{8},\frac{9}{11}$, which one is the greatest fraction

First take two fractions $\frac{3}{4},\frac{7}{8}$ multiply numerator of the first with the denominator of the other (3×8 = 24), similarly multiply numerator of the second with the denominator of the first (7 × 4 = 28). Since 28 is greater than 24 so $\frac{7}{8}$ is greater than $\frac{3}{4}$. Now take $\frac{7}{8},\frac{9}{11}$ to compare. Multiply numerator of the first with denominator of the second (7 × 11 = 77), similarly multiply numerator of the second to the denominator of the first (9 × 8 = 72). Since 77 is greater than 72, so $\frac{7}{8}$ is the greatest of the three given fractions.

To compare $\frac{8}{15}$ and $\frac{7}{9}$, multiply 8 with 9 and 15 with 7, Since the product of 15 and 7 (105) is greater than the product of 8 and 9 (72), so $\frac{7}{9}$ is greater than $\frac{8}{15}$.

72 105

$$\frac{8}{15}\times\frac{7}{9}$$

## Decimals

Decimals are real numbers having decimal point. Decimals are another form of fractions. When decimals are added or subtracted, the decimal points must be placed one under the other.

**Every integer has its point after it (45 is the same as 45. and Rs. 45 is the same as Rs. 45.00).**

**Example:**

4.9 + .73 + 7. Line up the decimal points.

```
 4.9
 .73
 7.
12.63
```

To add them, add as usual and place the decimal point in the line of the decimal points of the numbers to be added.

**Example:**

Which is the largest, .073, .5, .586, .08, or .59? Place the numbers under one another, lining up the decimal points. Fill in zeroes so that all of the decimals have the same number of places.

```
.073
.500
.586
.080
.590
```

.590 is the largest three-place decimal. Answer: **.59**.

## Multiplication

When you multiply decimals, the points do not have to be under one another. The product (answer) must contain as many numbers after its point as the total of the decimal

places in the two numbers being multiplied. For example, find the product of 0.28 and 0.3.
28 times 3 is 84, but where should the point be placed? .28 has two numbers after its point and .3 has one number after its point, making a total of three decimal places. Count three places to the left from the end of 84. Since 84 have two places, a zero must be placed in front of 8. **Answer: 0.084.**

## Decimal Places in Numbers

**Unit:** Placement of a number one place on the left of the decimal point. In 257.389, 7 is at unit place.
**Ten:** Placement of number two places on the left of the decimal point. In 257.389, 5 is at Ten place.
**Hundred:** Placement of number three places on the left of the decimal point. In 257.389, 7 is at hundred place.
**Tenth:** Placement of a number one decimal place on the right of decimal point. In 257.389, 3 is at tenth place
**Hundredth:** Placement of a number two decimal places on the right of the decimal point. In 257.389, 8 is at hundredth place.
**Thousandth:** Placement of a number three decimal places on the right of the decimal point. In 257.389, 9 is at thousandth place.

## Rounding Off Real Numbers

Nothing more than converting a number to a number of desired lengths (number of digits) is rounding off.

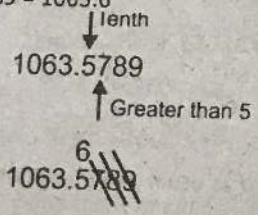
## To round off decimals

- Find the place value you want (the "rounding digit") and look at the digit just to the right of it.
- If that digit is less than 5, do not change the rounding digit but drop all digits to the right of it.
- If that digit is greater than or equal to five, add one to the rounding digit and drop all digits to the right of it.

## To round off whole numbers

- Find the place value you want (the "rounding digit") and look to the digit just to the right of it.
- If that digit is less than 5, do not change the "rounding digit" but change all digits to the right of the "rounding digit" to zero.
- If that digit is greater than or equal to 5, add one to the rounding digit and change all digits to the right of the rounding digit to zero.
- If the digit to the right of the place is equal to or greater than 5, round the number up by adding 1 to the place, and then eliminating all the digits to the right of the place.

**Example:** Round 1063.5789 to the nearest tenth.
**Answer:** 1063.5789 = 1063.6




If the digit to the right of the place is less than 5, round the number down by eliminating all the digits to the right of the place.
Example:
Round 10,57.3239 to the nearest hundredth.
**Answer:** 10,57.3239 = 10,57.32

## Consecutive Number Counting

The number of integers from A to B inclusive is B – A + 1.

## Example:

How many integers are there from 73 through 419, inclusive?
419 – 73 + 1 = 347
**HINT:** Don't forget to add 1.

## Sum of Consecutive Numbers

Sum = (average) × (number of terms)

## Example

What is the sum of the integers from 10 through 50, inclusive?
Average = (10 + 50) ÷ 2 = 30;
Number of terms = 50 – 10 + 1 = 41
Sum = 30 × 41 = 1,230

## Basic Arithmetic Operations

The basic operation of numbers and somewhat fewer variables involving addition, subtraction, multiplication, and division is arithmetic is covered on the test.
You should know the following arithmetic terms:

## Basic Understandings

- The result of addition is a sum or total.
- The result of subtraction in a difference.
- The result of multiplication is a product.
- The result of division is a quotient.
- In the expression $5^2$, the 2 is called an exponent.

## Exponents

Many numbers are the product of the same factor multiplied over and over again. For example, $32 = 2 \times 2 \times 2 \times 2 \times 2$. Another way to write this would be $32 = 2^5$, or "thirty-two equals two to the fifth power." The little number, or *exponent*, denotes the number of times that 2 is to be used as a factor. In the same way, $10^3 = 10 \times 10 \times 10$, or 1,000, or "ten to the third power," or "ten cubed." In this example, the 10 is called the base and the 3 is called the exponent. (You won't need to know these terms on the test, but you will need to know them to follow my explanations).

## Multiplication

When you multiply two numbers with the same base, you simply add the exponents.

## Example:

$2^3 \times 2^5 = 2^{3+5} = 2^8$

## Division

When you divide two numbers with the same base, you simply subtract the exponents. For example, $\frac{2^5}{2^3} = 2^{5-3} = 2^2$

## The Distributive Law

If you're multiplying the sum of two numbers by a third number, you can multiply each number in your sum individually. This comes in handy when you have to multiply the sum of two variables.
If a problem gives you information in "factored form" $-a(b+c)-$ then you should distribute the first variable before you do anything else. If you are given information that has already been distributed $-ab+ac-$ then you should factor out the common term, putting the information back in factored form.

## Example

$6(53) + 6(47) = 6(53+47) = 6(100) = 600$

## Multiplication First

$6(53) + 6(47) = 318 + 282 = 600$
You get the same answer each way, so why get involved with ugly arithmetic? If you use the distributive law, you don't even need to use you calculator.

## Raising a Power to a Power

When you raise a power to a power, you multiply the exponents. For example, $(2^3)^4 = 2^{3 \times 4} = 2^{12}$

## Exponent to a Fraction

If you square or cube a number greater than 1, it becomes larger. For example , $2^3 = 8$
If you square or cube a positive fraction smaller than one, it becomes smaller.
For example, $= \left(\frac{1}{2}\right)^3 = \frac{1}{8}$

A negative number raised to an even power becomes positive. For example, $(-2)^2 = 4$.
A negative number raised to an odd power remains negative. For example, $(-2)^3 = -8$

$A^5 \times A^5 = A^8$
$A^5 \div A^2 = A^3$
$A^5 \times B^2$ cannot be solved further, as the bases are different.
$A^3 + A^5$ cannot be solved further as these are different terms.
$A^3 + A^3 + 2A^3$ same terms are added.
$5A^3 - A^3 = 4A^3$

## Finding Square Root

Finding Square root is the reverse process of finding square of a quantity.

$\sqrt{4} = \sqrt{2\times2} = 2$ , $\sqrt{x^2} = \sqrt{x\times x} = x$

You should not be worried about finding the square roots without calculator, as you are not required to go up to fractions, rather the calculation remains in square root partially.

$\sqrt{12} = \sqrt{2\times2\times3} = 2\sqrt{3}$ , $\sqrt{80} = \sqrt{4\times4\times5} = 4\sqrt{5}$

### Treatment of Signs

## Addition and Subtraction Rules

If you add two quantities that have the same signs, simply add them and retain the sign.

$2 + 7 = 9$ and $-2 + (-7) = -9$

If you add two quantities of different signs, simply add them and the result will bear the sign of the quantity of greater absolute value.

$2 - 7 = 2 + (-7) = -5$
$7 - 2 = 7 + (-2) = 5$
$3A + 4A = 7A$
$3A - 4A = -A$
$7a^2 + 2a^2 = 9a^2$

$3a^2 - 2a$ can't be added since they are not like terms.
$3x + 5$ can't be added since they are not like terms.
$2A + 3B$ can't be added since they are not like terms.
If three or more quantities are to be added, add like positives, then like negatives, then combine like terms by subtracting absolute values.

$-8 + 7 - 13 + 12 = +19 - 21 = -2$
$6c - 5d - 4 - 8c + 7d - 6 = -2c + 2d - 10$

## Multiplication Rules

If two quantities having the same sign are multiplied, the answer is positive (+). If two quantities having the different signs are multiplied, the answer is negative (-). Two parentheses with no sign between them indicates multiplication, Also, no sign between a quantity and a parenthesis indicates multiplication, as does a raised dot between two quantities.

$(+6)(+5) = 30$
$(-9)(-3) = +27$
$-7(8) = -56$
$4 \cdot -4 = -16$

You can only add or subtract like terms. However, all terms, whether alike or different, can be multiplied. When like letters are multiplied, add exponents.

$3(-2Y) = -6Y$
$(7G)(-3K) = -21GK$
$A^3 \times A^4 = A^7$

## Division Rules

The rules are similar to those for multiplication. If you divide two quantities having the same sign, the answer will be positive. Dividing two quantities having different signs will give negative answer.

$$\frac{-6}{-2} = +3, \frac{-15}{+3} = +5, \frac{+16}{+2} = +8, \frac{+18}{-3} = -6$$

When dividing like letters, subtract their exponents. When any quantity is divided by itself (with the exception of zero divided by zero), the answer will be 1. A letter such as Y has an exponent of 1.

$$\frac{Y^4}{Y^3} = Y, \frac{Y}{Y} = 1, \frac{8Y^8}{2Y^2} = 4Y^6$$

When a quantity is divided into another quantity that contains two or more terms divide each of term by the first quantity.

$$\frac{6P-10}{-2} = -3P + 5, \frac{12Y+6}{6} = 2Y + 1$$

$$\frac{5x-7}{-3} = -\frac{5}{3}x + \frac{7}{3}, \frac{5b^2+10b}{5b} = b + 2$$

## Which operation do I do first?

In a problem that involves different operations, the operations must be performed in a particular order, and occasionally test makers like to see whether you know what that order is. Here's an easy way to remember the order of operations:

## Please Excuse My Dear Aunt Salma

This stands for Parentheses, Exponents, Multiplication, Division, Addition, and Subtraction. Do operations enclosed in parentheses first: then take care of exponents: then you multiply, divide, add, and subtract.

## SOLVED EXERCISE

**Directions:** You are given following questions from the topic, with four choices A through D. Select the choice that will answer the question best.
**The answers and explanations of the questions have been given at the bottom of each question.**

1. Arrange in descending order: $\frac{3}{8}, \frac{4}{9}, \frac{2}{7}$

**Explanation:**
Make the comparisons of two fractions each.

$\frac{3}{8} \overset{27}{\underset{32}{\times}} \frac{4}{9}, \quad \frac{4}{9} \overset{28}{\underset{18}{\times}} \frac{2}{7}, \quad \frac{3}{8} \overset{21}{\underset{16}{\times}} \frac{2}{7}$

$\frac{4}{9}$ is greater than $\frac{3}{8}$, and $\frac{4}{9}$ is greater than $\frac{2}{7}$, so $\frac{4}{9}$ is the largest fraction. $\frac{3}{8}$ is greater than $\frac{2}{7}$, so the answer is $\frac{4}{9}, \frac{3}{8}, \frac{2}{7}$

2. $40 + \frac{80}{.4}$ = what number?

**Explanation:**
First simplify the fraction:

$$\frac{80}{.4} = \frac{80}{.4} \times \frac{10}{10} = \frac{800}{4} = 200$$

Then add: 40 + 200 = 240.

3. If a bushel of apples weighs from 48 to 54 pounds and a bushel of melons weighs from 80 to 90 pounds, what is the smallest ratio between the weight of a bushel of apples and a bushel of melons?

**Explanation:**
"Smallest ratio" means smallest fraction, which will contain the smallest numerator but the largest denominator ($\frac{1}{10}$ is smaller than $\frac{1}{3}$). The answer is $\frac{48}{90}$, or $\frac{8}{15}$.

4. Simplify this fraction

$$\frac{3\frac{1}{3}}{5\frac{1}{3}+6\frac{1}{3}}$$

**Explanation:**
Add the fractions in the denominator and rewrite the expression

$$3\frac{1}{3} \div 11\frac{2}{3} \Rightarrow \frac{10}{3} \div \frac{35}{3} = \frac{10}{3} \times \frac{35}{3} = \frac{2}{7}$$

5. If $r$ is greater than 0 and $b = \frac{1}{r}$, does $b$ increase or decrease as $r$ increases?

**Explanation:**
If the numerators are the same, the smaller fraction has the larger denominator. Therefore, if $r$ increases and the numerator remains 1, the fractions get smaller and $b$ decreases.

6. Reduce $\frac{12c^2}{15c}$

**Explanation:**
Reduce 12 and 15 by canceling both by 3. Treat $\frac{c^2}{c} = c^{2-1}$.

The answer is $\frac{4}{5}c$.

7. Add $\frac{m}{2} + \frac{m}{3}$

**Explanation:**
Find L.C.D., which is 6. Convert each fraction to sixths and add:

$$\frac{m}{2} + \frac{m}{3} = \frac{m}{2} \times \frac{3}{3} + \frac{m}{3} \times \frac{2}{2}$$

$$= \frac{3m}{6} + \frac{2m}{6} = \frac{5m}{6}$$

8. Subtract $\frac{2}{5x^2}$ from $\frac{3}{4x}$

**Explanation:**
In a subtraction example, the quantity after the word "from" goes first:

$\frac{3}{4x} - \frac{2}{5x^2}$ L.C.D. is $20x^2$. $\frac{15x-8x}{20x^2}$ $15x - 8x = 7x$. So the answer is $\frac{7}{20x}$.

9. A woman owned $\frac{2}{3}$ of a store and sold $\frac{1}{5}$ of her share. What part of the store did she still own?

**Explanation:**
"$\frac{1}{5}$ of her share" means $\frac{1}{5}$ times her share. Since $\frac{1}{5}$ of $\frac{2}{3} = \frac{1}{5} \times \frac{2}{3} = \frac{2}{15}$ was sold. If you subtract $\frac{2}{15}$ from $\frac{2}{3}$, you'll know that what part of the store she still owned:

10. Change .68 to a fraction.

**Explanation:**

$$.68 = \frac{68}{100} = \frac{17}{25}$$

11. Change $\frac{3}{16}$ to a decimal correct to the nearest thousandth.

**Explanation:**
If your answer is to be rounded to the nearest thousandth, carry the division to one place past the thousandths (the ten-thousandths place):

$$\frac{3}{16} = 16\overline{)3.0000} \quad .1875$$

Since the extra place is a 5, we round up. The answer is .188.

12. $\left(\frac{1}{6}\right)\left(\frac{5}{6}\right) = (?)\left(\frac{4}{9}\right)$

**Explanation:**

$$\left(\frac{1}{6}\right)\left(\frac{5}{6}\right) = (?)\left(\frac{4}{9}\right) \Rightarrow \frac{5}{36} = \text{x times } \frac{4}{9}$$

Since the missing quantity is multiplied by $\frac{4}{9}$, do the "opposite" on the other side and divide by $\frac{4}{9}$ $\Rightarrow$

$\frac{5}{36} \div \frac{4}{9} = \frac{5}{36} \times \frac{9}{4} = \frac{5}{16}$

13. If $5x = 28$, what does $3x$ equal?

**Explanation:**

$5x = 28 \Rightarrow \frac{5x}{5} = \frac{28}{5} \Rightarrow x = \frac{28}{5}$

To find $3x$, multiply both sides of the equation $x = \frac{28}{5}$ by 3.

(3) $x = \frac{28}{5}(3) \Rightarrow 3x = \frac{84}{5} \Rightarrow x = \frac{84}{5}$ or $16\frac{4}{5}$

14. If $r = 3b$, what does $\frac{3}{4}r$ equal?

**Explanation:**

Just multiply both sides by $\frac{3}{4} \Rightarrow \frac{3}{4}r = \frac{9b}{4}$

# RATIOS AND PROPORTIONS

The quantitative relationship among two or more quantities is a ratio. For example the 3:4 represents that one (whole) quantity is divided in seven (3 + 4) equal parts, three parts on left and four parts on right.

To use the ratio for solving problem, you must convert it to mathematical form, three out of seven, and four out of seven.

$3:4 \rightarrow \frac{3}{7}$ and $\frac{4}{7}$

**Example:**

Mr. Kalim and Mr. Shahbaz Khan entered into a business partnership. They agreed the ratio of 3:5 for the distribution of profit. They commenced the business and earned profit of Rs. 24000. Find the share of Mr. Kalim.

**Solution:**

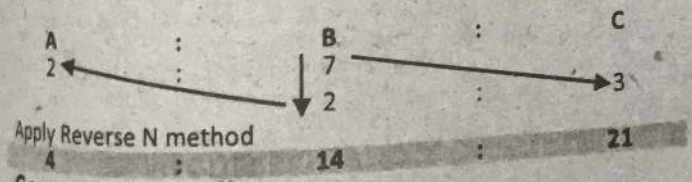
Convert Karim's share ratio to fraction $\rightarrow \frac{3}{8}$

Multiply Karim's fraction to the total profit $\rightarrow \frac{3}{8} \times 24000 =$ 9000

Answer is Rs. 9000

## Multiple Ratios

The ratio between A and B is 2 : 7 and the ratio between B to C is 2 : 3. Find the ratio A : B : C.




## Compare Logically

A ratio is the comparison of two things.

What is the ratio of the value of a kilometer to that of a mile?

This can be shown fractionally $\frac{5}{8}$ or by using a colon (5:8).

You can put any two things in a fraction numerically. It's logical to use only comparable things. What is the ratio of 8 inches to 1 yard? You answer $\frac{8}{1}$, but does it make sense? Is 8 inches 8 times as large as 1 yard? Of course not! Common sense will make you change 1 yard to 36 inches. Now the ratio becomes $\frac{8}{36}$ or $\frac{2}{9}$. Compare only like things.

**Example:**

What is the ratio of 30 minutes to 2 hours?

$\frac{30}{120}$ (2 hours = 120 minutes)

$= \frac{1}{4}$

## Proportions

To solve the proportion questions you must know the relation between the quantities.

### Direct Relation

If one quantity increases, the other quantity also increases.

**Example:**

If a car can travel 80 miles in 3 hours, how long will it take to travel 100 miles?

When something varies directly with something else, if you increase one of the things involved, the other will also increase. In the example given, if you increase the miles from 80 to 100, common sense tells us that the number of hours will also increase. The more miles you drive, the longer it should take. Therefore, let's make a proportion using a ratio of the miles and a ratio of the hours. The first number of miles mentioned is 80, so use the ratio (miles over miles).

As the first number of hours mentioned is 3, so use the ratio (hours over hours). X represents the second amount of hours since that's the unknown. Put the two ratios together to form the proportion. Cross- multiply and solve: $\frac{80}{100} = \frac{3}{x}$

$80x = 300 \Rightarrow x = \frac{30}{8} = 3\frac{3}{8}$ hours

**Example:**

If number of men working on a project increases, the work done by the men also increases.

### Inverse Relation

If one quantity increases, the other quantity decreases.

**Example:**

If 8 people take 6 hours to build a fence, how long would it take 10 people to build the same fence (assuming they work at the same rate as those in the first group)?

Common sense tells you that if you use more people, it will take less time to finish the job. To write the proportion needed to solve the example, first write the first ratio:

$$\frac{8 \text{ People}}{10 \text{ People}}$$

Since it is not a direct proportion, invert the second ratio ($\frac{6}{x}$ becomes $\frac{x}{6}$), the proportion is

$\frac{8}{10} = \frac{x}{6} \Rightarrow 10x = 48 \Rightarrow x = 4\frac{4}{5}$ hours

**Example**

If number of men working on a project increases, the numbe of working days decreases.

Since the missing quantity is multiplied by $\frac{4}{9}$, do the "opposite" on the other side and divide by $\frac{4}{9}$ $\Rightarrow$

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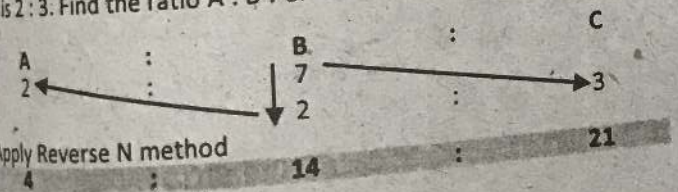


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**Example**

If number of men working on a project increases, the number of working days decreases.

## Conditions for Applying Relations

- While applying relation of two quantities consider all other quantities constant
- Don't consider given data (number values)

## Example

In a courier company, 50 men require 10 hours to prepare 1200 boxes for shipment. Once, the company received an order of 3200 boxes to process. The company assigned 40 men team to process this order. How many hours the team will need to complete the task?

## Solution

Place arrows based on the relation of quantity with unknown quantity (Hours). Men and Hours have inverse relation, so the arrowhead is down ward. Hours and Boxes have direct relation, so the arrowhead for Boxes is upward.

| Men | Hours | Boxes |
|---|---|---|
| 50 ↓ | 10 ↑ | 1200 ↑ |
| 40 ↓ | x | 3200 |

Now the equation becomes:

$$\frac{x}{10} = \frac{50}{40} \times \frac{3200}{1200}$$

Now solve for x.

## Ratios and Proportions – Inheritance

When a Muslim dies there are four duties which need to be performed. These are:

1. Payment of funeral expenses.
2. Payment of his/her debts.
3. Execution of his/her will.
4. Distribution of remaining estate amongst the heirs according to Sharia.

It is assumed that the preliminary issues have been resolved and we shall confine are ourselves principally to discussing the fourth and last duty. The task is to firstly, determine which of the relatives of the deceased are entitled to inherit and secondly, to determine the quantum share entitlement of each of the heirs concerned.

The Inheritance questions on the test are merely the application of Ratio and proportions. The wealth of a deceased person is divided in fixed Ratios among all heirs of the deceased. Complete Islamic Inheritance system is beyond the scope of this book. Our main focus is to the ratios for division of wealth of a deceased among the children of the person.

| If a person dies leaving | Division of Real and Personal Property |
|---|---|
| Wife and no relations | ¼ to wife, ¾ to the Bait-ul-mal |
| Wife and son (sons) | 1/8 to wife, rest to son (sons equally) |
| Wife, son and daughter | 1/8 to wife, 7/12 to son, 7/24 to daughter |
| Wife, two sons and two daughters | 1/8 to wife, 7/24 to each son and 7/48 to each daughter |
| Wife and one daughter | 1/8 to wife, ½ to daughter and 3/8 to Bait-ul-mal |
| Wife and daughters | 1/8 to wife, 2/3 to daughters and 5/24 to Bait-ul mal |

## Example:

Kamran died and left wealth of worth Rs. 96,000,000 to be divided among his heirs – one wife, two sons, and two daughters. What will be the share of one daughter?

## Solution:

In this particular case, the share of each daughter = Rs. $96000000 \times \frac{7}{48}$ = Rs. 14000000

# SOLVED EXERCISE

**Directions:** You are given following questions from the topic, with four choices A through D. Select the choice that will answer the question best. The answers and explanations of the questions have been given at the bottom of each question.

1. Find the ratio of 18 inches to 2 yards.

A. $\frac{3}{4}$ B. $\frac{1}{4}$

C. $\frac{1}{5}$ D. $\frac{2}{5}$

**Explanation:**

First convert yards to inches that is 2 yards = 2 ×3 × 12 = 72 inches. Now the ratio is 18 to 72 = 1 to 4 = $\frac{1}{4}$. The right answer is B.

2. If a train travels $\frac{5}{6}$ mile in $1\frac{1}{4}$ minutes, how many miles will it travel in 1 hour?

A. 20 miles B. 50 miles

C. 40 miles D. 30 miles

**Explanation :**

The train travels $\frac{5}{6} \div 1\frac{1}{4} = \frac{5}{6} \div \frac{5}{4} = \frac{5}{6} \times \frac{4}{5} = \frac{2}{3}$ miles in one minute. The distance traveled in 60 minutes (1 hour) = $\frac{2}{3} \times 60 = 40$ miles. The right answer is C.

**Note :**

12 inches = 1 foot and 3 feet = 1 yard

3. Find the value of x if 3 : b = x : c.

A. $\frac{3b}{c}$ B. $\frac{c}{3b}$

C. $\frac{2c}{3b}$ D. $\frac{3c}{b}$

**Explanation:**

$3c = bx$ and $x = \frac{3c}{b}$

The right answer is D.

4. How many miles are there between two cities if the distance is represented by a 2.4-inch line on a map having a scale of 1 inch to 8 miles?

A. 19.2 B. 12.8

C. 8.5 D. 38

**Explanation:**

The question is to find x from 1 : 8 = 2.4 : x . $1 \times x = 8 \times 2.4$ hence x = 19.2. The right answer is A.

5. How many cents will r books cost if t books cost m dollars?

A. $\frac{100mr}{t}$ B. $\frac{mr}{100t}$

C. $\frac{100t}{mr}$ D. $\frac{m}{100t}$

**Explanation:**

solve $\frac{x}{r} = \frac{100m}{t}$

**Note:**

1 dollar = 100 cents.

6. If apples cost 3 for 37 cents, find the cost of $1\frac{3}{4}$ dozen apples.

A. 111 cents B. 159 cents

C. 259 cents D. 211 cents

**Explanation:**

$1\frac{3}{4}$ dozens apples = $\frac{7}{4} \times 12 = 21$ apples. Now apply the ratios method $\frac{37}{3} = \frac{x}{21}$

$x = \frac{21 \times 37}{3}$ or $x = 7 \times 37 = 259$ cents. The right answer is C.

7. If 10 tractors are needed to plow a field in 4 hours, how many tractors are needed to plow the field in 5 hours?

A. 32 B. 4

C. 16 D. 8

**Explanation:**

$\frac{x}{10} = \frac{4}{5}$ the second ratio is reversed, as the relation is inverse. $x = \frac{10 \times 4}{5} = 8$. The right answer is D.

8. A car that gets 15 miles per gallon of gasoline can travel 250 miles on a full tank. If the same car got 20 miles per gallon, how many miles could it travel on a full tank?

A. 300 B. 750

C. $250\frac{3}{4}$ D. $333\frac{1}{3}$

**Explanation:**

$\frac{x}{250} = \frac{20}{15}$

The right answer is D.

9. A candy recipe calls for 5 parts milk, 4 parts cocoa, 4 parts syrup, 2 parts sugar, and 1 part butter. If you use 8 ounces of milk, how many ounces of candy mixture can you make?

A. $25\frac{3}{5}$ B. $5\frac{3}{5}$

C. 20 D. 128

**Explanation:**

Solve each ingredient with milk independently. For example, 5 parts of milk need 4 parts of cocoa. How many parts of cocoa is needed for 8 ounces of milk. The right answer is A.

**Tip**

When doing calculations with percents, change percents to fractions or decimals.

10. If it takes 10 minutes to walk $\frac{3}{7}$ mile, how many minutes will it take to walk the rest of the mile?

A. $2\frac{1}{3}$ B. $13\frac{1}{3}$

C. $4\frac{2}{7}$ D. 30

**Explanation:**

You are to answer the question "If it take 10 minutes to walk $\frac{3}{7}$ mile, how many minutes it will take to walk $\frac{4}{7}$ mile". The right answer is B.

## PERCENTAGE

A percentage is a part of 100. If one of your test score was 85 out of total 100, its mean your score was 85%.
The word 'percent' means 'per hundred' or 'out of 100', and % is the percent sign. Percent is a way of representing a part of something in terms of hundredths (i.e., 1/100).
For example, 100% = 100 hundredths = 100 x $\frac{1}{100}$ = 1 and 75% = 75 hundredths = 75 x ($\frac{1}{100}$) = $\frac{3}{4}$.
Percent can be expressed as a fraction (with a denominator of 100) or a decimal.

For example, 29% = $\frac{29}{100}$ = 0.29

Percents are often used to compare fractions with equal denominators of 100. To convert a percent to a fraction, drop the percent sign and divide the number by 100.

For example, 80% = 80/100 = $\frac{4}{5}$ and 125% = 125/100 = $\frac{5}{4}$ = $1\frac{1}{4}$.

As a more complicated example, consider the following:
To convert a fraction to a percent, multiply the number by 100 and insert the percent sign.

For example, $\frac{3}{5} = \frac{3}{5} \times \frac{1}{100}\% = 60\%$ and $\frac{1}{16} = \frac{100}{16}\% = \frac{25}{4}\% = 6\frac{1}{4}\% = 6.25\%$

To convert a percent to a decimal, drop the percent sign and divide the number by 100 (i.e., move the decimal point two places to the left, inserting zeros to the left if necessary).
For example, 13% = 0.13 and 2% = 0.02
To convert a decimal to a percent, multiply the decimal by 100 (i.e., move the decimal point two places to the right) and insert the percent sign.

### Example

0.2576 = 25.76% and 0.002 = 0.2%
To find a certain percent of a number, multiply the number by the percent expressed as a fraction or decimal.

> **Tip**
>
> It is advisable to convert a mixed number to an improper fraction during calculations.

For example to find 45% of 900, two possible ways are as follows.

Changing percent to fraction gives 45% = $\frac{45}{100} = \frac{9}{20}$. So, $\frac{9}{20} \times 900 = 405$.

Alternatively, changing percent to decimal gives 45% = $\frac{45}{100}$ = 0.45. So, 0.45 x 900 = 405.
The following fraction and decimal equivalents of percents are worth noting:

| | |
|---|---|
| 1% = 1/100 = 0.01 | 60% = 3/5 = 0.6 |
| 2% = 1/50 = 0.02 | 80% = 4/5 = 0.8 |
| 4% = 1/25 = 0.04 | 25% = 1/4 = 0.25 |
| 5% = 1/20 = 0.05 | 50% = 1/2 = 0.5 |
| 10% = 1/10 = 0.1 | 75% = 3/4 = 0.75 |
| 20% = 1/5 = 0.2 | 120% = 6/5 = 1.2 |
| 40% = 2/5 = 0.4 | 125% = 5/4 = 1.25 |

### Percent Change

Percent change (increase or decrease) from an original value to a new value frequently occurs.
**To find the percent change**, first find the amount of the change, then divide this amount by the original value, and finally express this quotient as a percent.

### Example

If the price of an item changes from $32 to $40, the amount of the increase is $(40 – 32) = $8 and the percent increase is $\frac{8}{32} = \frac{1}{4} = 0.25 = 25\%$.
On the other hand, if the price of the item changes from $40 to $32, the amount of the decrease is $(40 – 32) = $8 and the percent decrease is $\frac{8}{40} = \frac{1}{5} = 0.2 = 20\%$.
Interestingly, the percent increase from 32 to 40 is different from the percent decrease from 40 to 32.

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# APPLICATION OF PERCENTAGE

Many topics on the test are based directly on the concepts of percentage like

- Business Mathematics
- Financial Mathematics
- Consumer Mathematics
- Zakat
- Ushar

## Business Mathematics

Business mathematics part of the test includes the questions from the topics containing underlying concepts of basic business.

## Consumer Mathematics - Profit and loss problems

Profit and loss problems involves various terms like cost price, selling price, marked price etc. Basically, it is a difference between selling price and cost price. Cost price is the price paid to purchase an article or a product or we can say it is a cost incurred in manufacturing an article. Selling price is the price at which a product is sold.

## Various profit and loss formulas used in profit and loss:

Generally, profit is calculated as: Profit or gain = Selling Price (S.P) - Cost Price (C.P)

Similarly, loss is calculated as: Loss = Cost Price - Selling Price

$$\text{Profit percentage} = \frac{SP-CP}{CP} \times 100$$ (The profit on the basis of Cost Price)

Note: If you are asked to find the profit on the basis of Selling Price, then the formula changes to

$$\text{Profit percentage} = \frac{SP-CP}{SP} \times 100$$ (The profit on the basis of Selling Price)

### Example:

A bookseller expects a gain of 22.5% on his cost price. If on a certain day, his sale was of Rs. 39200, what was his profit?

### Solution:

Profit = SP – CP

Given Profit = 22.5% of CP

So, 22.5% of CP = SP – CP

CP = SP – 22.5% of CP

CP + 22.5% of CP = SP

122.5% of CP = SP

$\frac{122.5}{100} \times CP = SP$

$CP = \frac{100}{122.5} \times SP$

$$C.P. = \left(\frac{100}{122.5} \times 39200\right) = \left(\frac{1000}{1225} \times 39200\right) = 32000$$

Profit = (39200 - 32000) = Rs. 7200.

### Example:

Sam purchased 20 dozens of toys at the rate of Rs. 375 per dozen. He sold each one of them at the rate of Rs. 33. What was his percentage profit?

### Solution:

CP of each toy = 375/12 = 31.25

Gain per toy = 33 – 31.25 = 1. 75

Profit Percentage = $(1.75/31.25) \times 100 = 5.6\%$

### Example:

Shabir sold his dining table set at a loss of 20%. If he had sold it for $ 800 more, he would have received a profit of 5%. Find the cost price.

### Solution:

Let the cost price be $ 100

So when C.P = 100 , loss of 20% means

S.P = 100 – 20 = 80

Profit of 5% means S.P = 100 + 5 = 105

The difference of two S.P = 105 - 80 = 25

If the difference is 25, C.P = $100

If the difference is $ 800 , C.P = (100 / 25 ) x 800

C.P = $ 3200

## Consumer Mathematics - Stock and Shares

Basic Terminology:

### Stock Capital:

The total amount of money needed to run the company is called the stock capital.

### Shares or Stock:

The whole capital is divided into small units, called shares or stock.

For each investment, the company issues a 'share-certificate', showing the value of each share and the number of shares held by a person.

The person who subscribes in shares or stock is called a shareholder or stock holder.

### Dividend:

The annual profit distributed among shareholders is called dividend. Dividend is paid annually as per share or as a percentage.

### Face Value:

The value of a share or stock printed on the share-certificate is called its Face Value or Nominal Value or Par Value.

### Market Value:

The stock of different companies are sold and bought in the open market through brokers at stock-exchanges. A share or stock is said to be:

- **At premium or Above par,** if its market value is more than its face value.
- **At par,** if its market value is the same as its face value.
- **At discount or Below par,** if its market value is less than its face value.

Thus, if a Rs. 100 stock is quoted at premium of 16, then market value of the stock = Rs.(100 + 16) = Rs. 116.

Likewise, if a Rs. 100 stock is quoted at a discount of 7, then market value of the stock = Rs. (100 -7) = 93.

### Example:

A 6% stock yields 8%. The market value of the stock is:

### Solution:

For an income of Rs. 8, investment = Rs. 100.

For an income of Rs. 6, investment = Rs. $\left(\frac{100}{8} \times 6\right)$ = Rs. 75.

Market value of Rs. 100 stock = Rs. 75.

## Financial Mathematics - Simple Interest

Basic terminology:

### Principal:

The money borrowed or lent out for a certain period is called the principal or the sum.

### Interest:

Extra money paid for using other's money is called interest.

### Simple Interest (S.I.):

If the interest on a sum borrowed for certain period is reckoned uniformly, then it is called simple interest.

Let Principal = P, Rate = r% per annum (p.a.) and Time = T years. Then

$$\text{Simple Interest} = \left(\frac{P \times r \times T}{100}\right)$$

### Example:

Gul Khan borrowed Rs. 50000 from the sardar of the region. The agreed rate of interest per year was 15%. Gul Khan

returned the borrowed amount at the end of 5 years. How much amount he paid to the sardar as interest for this period?

**Solution:**

$I = Prt$

$= 50000 \times \frac{15}{100} \times 5$

$= \text{Rs. } 37500$

**Example:**

A sum fetched a total simple interest of Rs. 4016.25 at the rate of 9 p.c.p.a. in 5 years. What is the sum?

**Solution:**

$$\text{Principal} = \text{Rs.} \left( \frac{100 \times 4016.25}{9 \times 5} \right)$$

$$= \text{Rs.} \left( \frac{401625}{45} \right)$$

$= \text{Rs. } 8925.$

## Financial Mathematics - Compound Interest

Compound interest is interest paid on previously earned interest. Suppose, instead of paying 10% interest when the money is given back, you have your friend pay you 10% on the money he still has every year. If he doesn't pay you back for two years, then you will get 10% on $100 the first year, which is $110 and you will get 10% on $110, which is $121 at the end of the second year. Instead of getting $20, you will get $21. Another example might help explain this concept.

**Example:**

Suppose a bank offers an interest rate of 6% per annum (yearly) on a savings account that is compounded quarterly (four times a year). A person deposits $4,000 in the bank. How much money will be in his account at the end of one year?

**Solution:**

Since the interest is compounded quarterly, we can use the formula for basic interest, $I = Prt$, four times. The principal amount $P$ is $4,000, the interest rate $r$ is 6% ($r = 0.06$), and $t = \frac{1}{4}$ of a year. (Recall that $t$ is measured in years.)

So, the amount of interest earned on the savings account is:

$$I = Prt = (\$4,000)(0.06)\left(\frac{1}{4}\right) = \$60$$

Now, as we start the second quarter, the principal is no longer $4,000. Since we have accumulated interest, the new principal is $4,000 + $60 = $4,060. Using that new principal, the interest gained in the second quarter is:

$$I = (\$4,060)(0.06)\left(\frac{1}{4}\right) = \$60.90.$$

The interest paid at the end of the third quarter on the principal of $6,060 + $60.90 = $6,120.90 is:

$$I = (\$4,120.90)(0.06)\left(\frac{1}{4}\right) = \$61.8135 = \$61.81$$

The final amount of interest paid, at the end of the fourth quarter, will be equal to:

$$I = (\$4,182.71)(0.06)\left(\frac{1}{4}\right) = \$62.74065 = \$62.74$$

Adding that interest amount to the principal going into that period ($4,182.71), we get the balance in the account after one year. It will be $4,182.71 + $62.74 = $4,245.45.





## Compound Interest Formulae

Let Principal = P, Rate = r% per annum, Time = $n$ years.

When interest is compound Annually:

$$\text{Amount} = P\left(1 + \frac{r}{100}\right)^n$$

When interest is compounded Half-yearly:

$$\text{Amount} = P\left[1 + \frac{(r/2)}{100}\right]^{2n}$$

When interest is compounded Quarterly:

$$\text{Amount} = P\left[1 + \frac{(r/4)}{100}\right]^{4n}$$

When interest is compounded Annually but time is in fraction, say $3\frac{2}{5}$ years.

$$\text{Amount} = P\left(1 + \frac{r}{100}\right)^3 \times \left(1 + \frac{\frac{2}{5}r}{100}\right)$$

When Rates are different for different years, say $r_1\%$, $r_2\%$, $r_3\%$ for 1st, 2nd and 3rd year respectively.

$$\text{Then, Amount} = P\left(1 + \frac{r_1}{100}\right)\left(1 + \frac{r_2}{100}\right)\left(1 + \frac{r_3}{100}\right).$$

Present worth of Rs. x due n years hence is given by:

$$\text{Present Worth} = \left(1 + \frac{r}{100}\right)^{-x}.$$

**Example:**

What will be the compound interest on a sum of Rs. 25,000 after 3 years at the rate of 12% p.a.?

**Solution:**

$25000 \times (1.12)^3 = \text{Rs. } 35123.20$

## Zakat

Zakat is one of the five pillars of Islam. It has been mentioned, along with daily Prayers (Salaat / Namaz), over seventy times in the Quran.

Just as Salaat is the most important act of worship which has to be performed bodily, so is Zakat the main act of worship which has to be performed monetarily. Those who fulfill this duty have been promised abundant reward in this world and hereafter. Whoever evades Zakat has been sternly warned in the Qur'an and Hadith of the consequences.

The payment of Zakat is compulsory on the excess wealth or effects which is equal to or exceeds the value of Nisaab, and which is possessed for a full Islamic year. If such wealth decreases during the course of the year and increases again to the value of Nisaab before the end of the year, the Zakat then must be calculated on the full amount that is possessed at the end of the year.

Zakat is obligatory upon a person if :

- He or she is an adult, sane, free and Muslim.
- He/she must possess wealth in excess of specified minimum (Nisaab) excluding his or her personal needs (clothing, household furniture, utensils, cars etc. are termed article of personal needs).
- It should be possessed for a complete lunar year.
- It should be of productive nature from which one can derive profit or benefit such as merchandise for business, gold, silver, livestock etc.

### Types of wealth on which zakat is imposed:

- Gold and silver, in any form.
- Cash, bank notes, stocks, bonds etc.
- Merchandise for business, equal to the value of Nisaab.
- Livestock.
- On income derived from rental business.

## Calculation of zakat:

- To calculate Zakat on jewelry etc. one must first determine the gold or silver content and then calculate the Zakat according to current market price.
- If the Gold possessed is less than 87.48 grams or if silver possessed is less than 612.36 grams, but the value of both combined is equal to or exceeds the Nisaab of either Gold or Silver, the Zakat will be due.
- In the event of an article not being of pure gold or pure silver, but containing a mixture of other metals and the gold or silver content is more than the other metal, it will be regarded as gold or silver and Zakat will be due. But in the case where other metal/s is of greater quantity than either gold or silver, Zakat will not be due on this article.
- For stocks (shares held in a company), Zakat is calculated based upon the current market value. As machinery, land, fixtures and fittings, furniture, buildings etc. are exempt from Zakat, one is allowed to subtract these from the total asset. This could be obtained from annual reports. For example, if one has shares worth $1000 and machinery, land etc., are worth 5% of the total asset, then deduct $50 for these assets; afterwards deduct the liabilities of the company proportionately to the percentage of shares held. Zakat must be calculated on the balance.

## Types of wealth on which zakat is not imposed:

- On any metals other than gold or silver.
- Fixtures and fittings of a shop, car, trucks or any delivery vehicle etc., which is used in running business.
- Diamonds, pearls, other precious or semi-precious stones which are for personal use.
- There is no Zakat on personal residence, household furniture, pots and pan, personal clothing, whether they are in use or not.
- There is no Zakat on a person whose liabilities exceed or equal his assets.

## Rate of Zakat

**Zakat is due at the rate of 2.5%.**

The question of Zakat involves the concepts of percentage.

### Example:

A person has one house of worth 5,000,000 (not in personal use), 20 tolas of pure gold, and bank deposit of Rs. 400,000. How much the person has to pay as zakat if the current rate of gold is Rs. 45000 per tola?

### Solution:

Calculate total asset value

| Asset | Qty × Rate | Value |
|---|---|---|
| House | 1 × 5000000 | 5000000 |
| Gold | 20 × 45000 | 900000 |
| Cash | 1 × 400000 | 400000 |
| | | Total Value = 6300000 |

$$\text{Zakat} = 6300000 \times \frac{2.5}{100} = 157500$$

## Ushr

Ushr is the obligatory charge *(Zakat)* on farm produce which is one-tenth for one kind of land and one-twentieth for others.

### Rate of Ushr

- If the farm or garden is watered naturally by rain or spring water, or river or stream water, tenth part of the produce is obligatory.
- If the farm or garden is irrigated by artificial means like the well, tube well, canals, etc. twentieth part is obligatory.

### Regulations Concerning Ushr

- Ushr has to be taken out from the total produce and after that other charges of agriculture in the way of ploughing, watering, supervision, etc. will be met.
- The produce becomes subject to Ushr as soon as the crop becomes fit for use in any form, e.g. the grain, maize, mango etc. become sable even before they are ripe; Ushr therefore has to be calculated before the crop is put to private use in any way.
- If a person sells away a crop or garden before the fruit is ripe, Ushr will be the responsibility of the buyer, but if it is sold after the fruit has become ripe, Ushr will be paid by the seller.
- Payment of Ushr is the responsibility of the cultivator of the land whether he has taken it on lease of borrowed it for a short period.
- If two persons are jointly cultivating a piece of land, both will have to share the Ushr whether the expenses of seed, etc. have been borne by one or both.
- There is no condition of Nisab for Ushr to be obligatory. Ushr is obligatory irrespective of the quantity of produce, unless it is in negligible quantity, e.g., 2 kilos or so.
- There is no condition of the passage of a year either; each crop is subject to Ushr, whether it is harvested once a year or twice a year.
- Ushr is payable on the produce of lands owned by minors and insane persons.
- Waaf lands are also subject to Ushr which will be paid away by the cultivator.
- If a piece of land is irrigated naturally as well as by artificial means, this fact will be taken into account while calculating Ushr. If the land has been irrigated naturally more often, Ushr will be one-tenth, otherwise one-twentieth.
- Ushr may be paid out in kind or in cash of equivalent value.
- Lands in possession of the Muslims living in non-Muslim states are subject to Ushr.
- Ushr is not annulled by the payment of land revenue.
- The heads of expenditure of Ushr are the same as of *Zakat*.

### The Hidden Treasure

This may be minerals or some other treasure hidden in the earth. Regulations concerning it are briefly as follows:
According to Hadith, one-fifth of a treasure, which is unearthed, belongs to the Public Treasury (Bait-ul-Mal).
In case of minerals like iron, silver, gold, tin or sulfur, etc. one fifth will be handed in to the Public Treasury and four-fifth will be handed in to the Public Treasury and four-fifths will be retained by the mine owner.
There is no share of the Bait-ul-Mal in those things which do not melt in the fire, e.g. diamonds, gems, etc. Similarly minerals in liquid state like petroleum, mercury, etc. are exempt from Ushr duty.

### Example:

A farmer cultivated a piece of land and spent Rs. 30,000 for fertilizers and pesticides. An extra expense was of water from tube well which cost Rs. 2000. The crop sold for Rs. 120,000. How much amount the farmer has to pay as Ushr?

### Solution:

Net gain from the crop = 120000 – 30000 - 2000 = 88000

$$\text{Ushr} = 88000 \times \frac{5}{100} = 4400$$

Ushr = Rs. 4400

## SOLVED EXERCISE

**Directions:** You are given following questions from the topic, with four choices A through D. Select the choice that will answer the question best.
The answers and explanations of the questions have been given at the bottom of each question.

1. Convert $1\frac{2}{5}\%$ to a fraction.

**Explanation:**

Since percent is part of 100, $1\frac{2}{5}\%$ becomes $\frac{1\frac{2}{5}}{100}$, which is written

$$1\frac{2}{5} \div 100 \;.\; \frac{7}{5} \div \frac{100}{1} \;.\; \frac{7}{5} \cdot \frac{1}{100} = \frac{7}{500}$$

2. $\frac{7}{3}$ is what percent?

**Explanation:**
Write an equation. "What percent" means what part of hundred. Thus, $\frac{7}{3} \cdot \frac{x}{100}$. Cross-multiply and solve:

$$3x = 700 \rightarrow \frac{3x}{3} = \frac{700}{3} \rightarrow x = \frac{700}{3}\% \rightarrow 233\frac{1}{3}\%$$

3. $83\frac{1}{3}\%$ is how many sixteenths?

**Explanation:**

Save time and remember that $83\frac{1}{3}\% = \frac{5}{6}$. You could write $\frac{83\frac{1}{3}}{100}$ and simplify, but the time saved by memorizing the equivalents is significant. To continue,

$$\frac{5}{6} = \frac{x}{16} \rightarrow 6x = 5 \cdot 16 \rightarrow 6x = 80 \rightarrow \frac{6x}{6} = \frac{80}{6}$$

$$\rightarrow x = \frac{40}{3} \text{ or } 13\frac{1}{3}$$

4. Change .076 to a percent.

**Explanation:**
A quick way is to slide the decimal point two places to the right (to change a decimal to a percent): .076 = 7.6%. However, the answer may appear in fraction form, so .6 must be converted to $\frac{6}{10}$ or $\frac{3}{5}$. The answer is $7\frac{3}{5}\%$.

5. Change $8\frac{1}{2}\%$ to a decimal.

**Explanation:**

Change $\frac{1}{2}$ to a decimal: $2\overline{)1.0} = .5$

So $8\frac{1}{2}\% = 8.5\%$. Next, slide the decimal point two places to the left (to change a percent to a decimal) and drop the % sign: 8.5% = .085.

6. $4b$ is what percent of $30a$?

**Explanation:**
Write an equation, but be careful of the extra letters:

$$4b = \frac{x}{100} \cdot 30a \rightarrow \frac{4b}{1} = \frac{30ax}{100} \rightarrow$$

$$30ax \cdot 1 = 4b \cdot 100 \rightarrow 30ax = 400b \rightarrow$$

$$\rightarrow \frac{30ax}{30a} = \frac{400b}{30a} \rightarrow x = \frac{400b}{30a} \rightarrow x = \frac{40b}{3a}$$

7. 7b is y % of what number?

**Explanation:**
Let $x$ be the missing number.

$$7b = \frac{y}{100} \cdot x \rightarrow 7b = \frac{y}{100} \cdot \frac{x}{1} \rightarrow \frac{7b}{1} = \frac{xy}{100} \rightarrow$$

$$xy = 700b \rightarrow \frac{xy}{y} = \frac{700b}{y}$$

$$\rightarrow x = \frac{700b}{y}$$

8. Find the missing number: $\frac{?}{.24} = 12\%$

**Explanation:**
Put a letter where the question mark is, change the percent to a fraction, and solve:

$$\frac{x}{.24} = \frac{12}{100} \rightarrow \frac{x}{.24} \cdot \frac{100}{100} \rightarrow \frac{100x}{24} \rightarrow$$

$\frac{100x}{24} = \frac{12}{100}$ Reduce to: $\frac{25x}{6} = \frac{3}{25}$
Cross-multiply and finish:

$$25x \cdot 25 = 6 \cdot 3 \rightarrow 625x = 18 \rightarrow \frac{625x}{625} = \frac{18}{625} \rightarrow$$

$$x = \frac{18}{625}$$

9. $\frac{1}{8}$ of 22 is what percent of 4?

**Explanation:**
Write an equation, and it's easy:

$$\frac{1}{8} \cdot 22 = \frac{x}{100} \cdot 4 \rightarrow \frac{1}{8} \cdot \frac{22}{1} = \frac{x}{100} \cdot \frac{4}{1} \rightarrow$$

$$\frac{22}{8} = \frac{4x}{100} \rightarrow \frac{11}{4} = \frac{x}{25} \rightarrow 4x = 275$$

$$\rightarrow \frac{4x}{4}=\frac{275}{4} \rightarrow x=\frac{275}{4} \text{ or } 68\frac{3}{4}$$

10. Shakir paid $7.50 to repair a toaster rather than buy a new one for $30. What percent of the cost of the new toaster did he save?

**Explanation:**

Use the question to write an equation: "What percent of the cost did he save?"

$$\frac{x}{100}\cdot\$30=\$22.50$$

(To find out what he saved, subtract $7.50 from $30.) Simplify and solve: $x = 75\%$

11. On selling 17 balls at Rs. 720, there is a loss equal to the cost price of 5 balls. The cost price of a ball is:

**Explanation:**

(C.P. of 17 balls) - (S.P. of 17 balls) = (C.P. of 5 balls)
C.P. of 12 balls = S.P. of 17 balls = Rs.720.

C.P. of 1 ball = Rs $\begin{pmatrix}720\\12\end{pmatrix}$ = Rs. 60.

12. What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?

**Explanation:**

Let the principal be P and rate of interest be R%.

Required ratio = $\begin{pmatrix}P\times R\times 6\\100\end{pmatrix}_{6PR}$ $\begin{pmatrix}P\times R\times 6\\100\end{pmatrix}_{9PR}$ = 6 = 2 : 3.

13. The compound interest on Rs. 30,000 at 7% per annum is Rs. 4347. The period (in years) is:

**Explanation:**

Amount = Rs. (30000 + 4347) = Rs. 34347.
Let the time be *n* years.

Then, $30000\begin{pmatrix}1+7\\100\end{pmatrix}^n = 34347$

$$\Rightarrow \begin{pmatrix}1+7\\100\end{pmatrix}^n = \frac{34347}{30000} = \frac{11449}{10000} = \begin{pmatrix}107\\100\end{pmatrix}^2$$

$n = 2$ years.

14. By investing Rs. 1620 in 8% stock, Naveed Maemon earns Rs. 135. The stock is then quoted at:

**Explanation:**

To earn Rs. 135, investment = Rs. 1620.

To earn Rs. 8, investment = Rs. $\begin{pmatrix}1620\\135\end{pmatrix}\times 8$ = Rs. 96.

Market value of Rs. 100 stock = Rs. 96.

15. A 12% stock yielding 10% is quoted at:

**Explanation:**

To earn Rs. 10, money invested = Rs. 100.

To earn Rs. 12, money invested = Rs. $\begin{pmatrix}100\\10\end{pmatrix}\times 12$ = Rs. 120.

Market value of Rs. 100 stock = Rs. 120.

16. A man paid zakat of Rs. 1200 for the current year. What was his wealth in Rupees for which he paid the Zakat?

**Explanation:**

1200 is 2.5% of the wealth for which he paid Zakat.

$X \times \frac{2.5}{100} = 1200$

X = Rs. 48000

# PERMUTATION

A permutation is an arrangement of objects in definite order or each of the different arrangements which can be made by taking same or all of a number of things is called a permutation. The simplest sort of permutations question might ask you how many different arrangements are possible for 6 different chairs in a row, or how many different 5 letter arrangements of the letters in the word SMOKE are possible. Both of these simple questions can be answered with the same technique.

## Factorial

Factorial is nothing more than a notation represented by the sign!. A factorial is simply the product of a series of integers counting down to 1 from the specified number.

## Example:

6! is read as 6 factorial and it means 6.5.4.3.2.1, which equals 720.

The number of possible arrangements of any group with n numbers is simply n!. In this way, the number of possible arrangements of the letters in SMOKE is 5!. Because there are 5 letters in the group, That means 5.4.3.2.1 arrangements, or 120.

## Permutations in Small Groups

Permutations get a little difficulty when you work with smaller arrangements. For example, what if you were asked how many 2- letter arrangements could be made from the letters in SMOKE?

Here the total number of elements in the letter SMOKE is 5, and the number of elements in group is 2

You can solve this problem in quite a simple relation by introducing the terms

n = 5 and r = 2

$$\text{Total Possible Arrangements} = \frac{n!}{(n-r)!}$$

Hence in this case, the total arrangement = $\frac{5!}{(5-2)!} = \frac{5.4.3.2.1}{3.2.1} = 5.4 = 20$

### Two Tasks Possibilities

If an operation can be performed in 'm' different ways and then a second operation can be performed in 'n' different ways, then the two operations taken together can be performed in $m \times n$ ways.

This can be extended to any finite number of operations.

## Example:

A hall has 6 gates. In how many ways can a man enter the hall through one gate and come out through a different gate?

Since there are 6 ways of entering into the hall, therefore for coming out the hall through different gate, number of ways = 5

Hence by the fundamental principle of multiplication, the total number of ways $= 6 \times 5 = 30$.

## Two Independent Tasks Possibilities

If an operation can be performed in 'm' different ways and another operation, which is independent of the first operation, can be performed in 'n' different ways, then either of the two operations can be performed in $(m+n)$ ways.

This can be extended to any finite number of mutually exclusive events.

## Example

There are 30 students in a class in which there are 20 boys and 10 girls. The class teacher selects either a boy or a girl for monitor of the class. In how many ways the class teacher can make this selection?

Clearly, there are 20 ways to select a boy and 10 ways to select a girl.

Number of ways $= 20+10 = 30$.

## Combinations

Combination is another form of arrangement problem. It differs from permutations in just one way:

In combinations, order doesn't matter. A permutations question might ask you to form different numbers from a set of digits. Order would certainly matter in that case, because 135 is very different from 513.

Similarly, a question about seating arrangements would be a permutations question, because the word "arrangements" tells you that order is important. So questions that ask about "schedules" or "orderings" require you to calculate the number of permutations.

Combinations questions, on the other hand, deal with groupings in which order isn't important. The group of Kausar - Laila – Aamir isn't any different from Aamir – Laila – Kausar, far as committees go, in the same way. Combinations questions often deal with the selection of committees, teams, or pairs.

Combination and permutation question can be very similar in appearance. Always ask yourself carefully whether sequence is important in a certain question before you proceed.

## Calculating Combinations

Calculating combinations is quite easy. All you have to do is throw out duplicate answers that count as separate permutations, but not as separate combinations. You, if more mathematical mind might use the relation:

$$\text{Total Possible combinations} = \frac{n!}{r!(n-r)!}$$

## SOLVED EXERCISE

**Directions:** You are given following questions from the topic, with four choices A through D. Select the choice that will answer the question best.

The answers and explanations of the questions have been given at the bottom of each question.

1. How many different 4- person teams can be made from a group of 9 players?

A. 3,024 B. 1,512
C. 378 D. 254
E. 126

**Explanation:**

Here n = 9 and r = 5

Possible combinations = $\frac{9!}{5!(9-5)!}$ = 126. The right answer is E.

2. Suzuki comes in 5 models, 8 colors, and 3 sizes. How many Suzuki must the local dealer have on hand in order to have one of each kind available?

A. 24 B. 120
C. 16 D. 39

**Explanation**

5×8×3 =120. The right answer is B.

3. How many odd numbers of three digits each can be formed from the digits 2, 4, 6, and 7 if repetition of digits is permitted?

A. 6 B. 27
C. 24 D. 16

**Explanation**

As repetition is allowed, so first two of three positions have 4 possibilities each. The third position has only one possibility (to make the number odd, only 7 can be placed at 3rd position) Total number of cars= 4×4×1= 16

The right answer is D.

## ARITHMETIC AND GEOMETRIC SEQUENCES

### Arithmetic Progression

An arithmetic progression is a sequence of numbers such that the difference of any two successive members of the sequence is a constant.

**Example:**

The sequence 1, 2, 3, 4, ... is an arithmetic progression with common difference **1**.

**Example:**

The sequence 3, 5, 7, 9, 11,... is an arithmetic progression with common difference **2**.

**Example:**

The sequence 20, 10, 0, -10, -20, -30, ... is an arithmetic progression with common difference **-10**.

If the initial term of an arithmetic progression is $a_1$ and the common difference of successive members is d, then the n-*th* term of the sequence is given by

$$a_n = a_1 + (n - 1)d, n = 1, 2, ...$$

The sum S of the first n numbers of an arithmetic progression is given by the formula:

$$S = \frac{n}{2}(a_1 + a_n)$$

where a1 is the first term and an the last one.

or

$$S = \frac{n}{2}(2a_1 + d(n-1))$$

**Example:**

Find the sum of first 10 terms of 2, 7, 12, 17, 22, 27, 32, 37, 42, 47, .....

**Solution:**

Common difference = d = 5

First Term = $a_1$ = 2

Number of terms to be sum up = n = 10

$$S = \frac{10}{2}(2 \times 2 + 5(10-1))$$

S = 245

**Example:**

Find the sum of the first 50 terms of the sequence

1, 3, 5, 7, 9, . . . .

**Solution:**

This is an arithmetic progression, and we can write down

a = 1 , d = 2 , n = 50 .

We now use the formula, so that

$$Sn = \frac{n}{2}(2a + (n - 1)d)$$

$$S50 = \frac{50}{2} \times (2 \times 1 + (50 - 1) \times 2)$$

$$= 25 \times (2 + 49 \times 2)$$

$$= 25 \times (2 + 98)$$

$$= 2500$$

### Geometric Progression

A geometric progression (also inaccurately known as a **geometric series**) is a sequence of numbers such that the quotient of any two successive members of the sequence is a constant called the common ratio of the sequence.

A geometric sequence can be written as:
$aq^0=a$, $aq^1=aq$, $aq^2$, $aq^3$, ... where $q \neq 0$, q is the common ratio and a is a scale factor.

**Example:**
The sequence 1, 3, 9, 27, 81 is a geometric sequence. Note that after the first term, the next term is obtained by multiplying the preceding element by 3.
The geometric sequence has its sequence formation: $a_1, a_1r, a_1r^2, \ldots, a_1r^{n-1}, a_1r^n$
To find the *nth* term of a geometric sequence we use the formula:

$$a_n = a_1r^{n-1}$$

| | | |
|---|---|---|
| where | $r$ | = common ratio |
| | $a_1$ | = first term |
| | $a_{n-1}$ | = the term before the *n* th term |
| | $n$ | = number of terms |

## Sum of Terms in a Geometric Progression

Finding the sum of terms in a geometric progression is easily obtained by applying the formulas:

*nth* partial sum of a geometric sequence

$$S_n = \frac{a_1(1-r^n)}{1-r}, \quad r \neq 1$$

**Example:**
Write down the 8th term in the Geometric Progression 1, 3, 9, ...

**Solution:**

$a_1 = 1;\ a_2 = 3;\ a_3 = 9;\ n = 8$ — write down key terms

$r = \frac{a_2}{a_1} = \frac{3}{1} = 3$ — find the common ratio r using $r = \frac{a_2}{a_1}$

$a_8 = a_1r^{8-1}$ — substitute n = 8 to $a_n = a_1r^{n-1}$

$= (1)(3)^7$ — substitute $a_1 = 1$ and $r = 3$

$= (3)^7$ — multiply (1) and $(3)^7$

$a_8 = 2187$ — simplify (3)7 = 2187

**Example:**
Find the number of terms in the geometric progression 6, 12, 24, ..., 1536

**Solution:**

$a_1 = 6;\ a_2 = 12;\ a_3 = 24;\ a_n = 1536$ — write down key terms

$r = \frac{a_2}{a_1} = \frac{12}{6} = 2$ — find r using $r = \frac{a_2}{a_1}$

$1536 = (6)(2)^{n-1}$ — substitute the values of $a_1, a_n$ and r to $a_n = a_1r^{n-1}$ to find n

$256 = (2)^{n-1}$ — divide both sides by 6

$2^8 = 2^{n-1}$ — change 256 to its exponential form form whose base = r

$8 = n - 1$ — equate the indices since they both have the same base

$8 + 1 = n$ — add 1 to both sides

$9 = n$ — add 8 and 1

Hence, 1536 is the 9th term.

## Finding the sum of a Geometric Series

**Example:**

Find the sum of each of the geometric series $-2, \frac{1}{2}, -\frac{1}{8}, \ldots, -\frac{1}{37268}$

**Solution:**

$a_1 = -2;\ a_2 = \frac{1}{2};\ a_3 = -\frac{1}{8};\ a_n = -\frac{1}{37268}$ write down key terms

$r = \frac{a_2}{a_1} = \frac{\frac{1}{2}}{-2} = -\frac{1}{4}$ find r using $r = \frac{a_2}{a_1}$

$-\frac{1}{37268} = (-2)\left(-\frac{1}{4}\right)^{n-1}$ substitute the values of $a_1, a_n$ and r to $a_n = a_1 r^{n-1}$ to find n

$\frac{1}{65536} = \left(-\frac{1}{4}\right)^{n-1}$ divide both sides by $-2$

$\left(-\frac{1}{4}\right)^{8} = \left(-\frac{1}{4}\right)^{n-1}$ change $\frac{1}{65536}$ to its exponential form form whose base=r

$8 = n - 1$ equate the indices since they both have the same base

$8 + 1 = n$ add 1 to both sides

$9 = n$ add 8 and 1

$S_9 = \frac{-2\left(1-\left(-\frac{1}{4}\right)^9\right)}{1-\left(-\frac{1}{4}\right)}$ substitute the values of $a_1, r$ and $n$ to $S_n = \frac{a_1(1-r^n)}{1-r}$

$= \frac{1\left(1-\left(-\frac{1}{262144}\right)\right)}{\frac{5}{4}}$ evaluate $\left(-\frac{1}{4}\right)^9$ then subtract $-\frac{1}{4}$ from 1

$= \frac{\frac{262145}{262144}}{\frac{5}{4}}$ evaluate $\left(1-\left(-\frac{1}{262144}\right)\right)$

$S_9 = \frac{52429}{60536}$ divide $\frac{262145}{262144}$ by $\frac{5}{4}$

## Average

The term average can technically refer to a variety of mathematical ideas, but on the test, it refers to the arithmetic mean. It is found by adding the numbers given and then dividing this sum by the number of items being averaged. Hence the basic equation for average questions is:

$$\text{Average} = \frac{\text{Sum of Entities}}{\text{Number of Entities}} \rightarrow \frac{s}{n} = A$$

## Alert

If a problem calls for simply the average or the mean, it is referring to the arithmetic mean.

Just in simple words, on the test, the average (also called arithmetic mean) of a set of 5 numbers is simply the sum of all the numbers divided by 5. In other words, if you want to find the average of three numbers add them up and divide by 3.

## Example:

Find the arithmetic means of 2, 8, 5, 8, 6, and 12.

## Solution:

The sum of numbers = 2 + 8 + 5 + 8 + 6 + 12 = 42
There are 6 numbers, hence n = 6

$$\text{Arithmetic mean} = \frac{2+8+5+9+6+12}{6}$$

$$= \frac{42}{6} = 7$$

**Answer:** The arithmetic mean is 7

## Single Unit Quantities

The test does not always write average questions with clear solutions. The easy questions base normally on single unit quantities like Currency, temperature, height, weight (Kgs). If the question on the test gives you the monthly incomes (in any currency) of five persons, you can find the average simply

by adding the income of all five persons and then dividing it by 5.

**Sum of entities** = (Number of entities) × Average. The average of two numbers is 5, the sum of the numbers is 5×2 = 10.

Average is also called as **mean** or **arithmetic mean**. It gives the central value of data.

## Averages (Mixed Unit Quantities)

The quantities described by at least two other quantities cannot be averaged by using basic equation of arithmetic mean rather, to feel comfortable in time management, you'll have to use CAT table method explained by following examples.

## Some Common Double Unit Entities

- $\text{Price} = \frac{\text{Value}}{\text{Quanty}}$
- $\text{Average} = \frac{\text{Value Sum of All Entities}}{\text{Total Number of Entities}}$
- $\text{Concentration} = \frac{\text{Solute}}{\text{Solvent}}$
- $\text{Speed} = \frac{\text{Dis tan ce}}{\text{Time}}$

## To Find Average Price

$$\text{Average Price} = \frac{\text{Total Value}}{\text{Total Quanty}}$$

### Example:

A man buys 5 Kg of Mangoes at the price of Rs. 80 per Kg. Next time, he purchases 10 Kg of mangoes at the price of Rs. 90 per Kg. Find the average price per Kg of the two transactions.

### Solution:

Use CAT table method for mixed unit quantities.

| | | | |
|---|---|---|---|
| Transaction 1 | 5 | 60 | 300 |
| Transaction 2 | 10 | 120 | 1200 |
| Totals | 15 | x | 1500 |

15 x = 1500, x = 100 (Average price for 15 Kg mangoes)

## Average of Averages

First, apply basic equation of average to find the sum of each average given, then add all sums and divide it by sum of all ns (numbers).

### Example:

A boy scored 55 in average of five tests. He scored 65 in average of first two tests. What is his average score in last three tests?

### Solution:

Since, this is the case of double unit entities so apply CAT table method.

| | | | |
|---|---|---|---|
| First average | 5 | 55 | 275 |
| Second Average | 2 | 65 | 130 |
| Difference | 3 | x | 145 |

$$3x = 145 \quad x = \frac{145}{3} = 48.33$$

## Median

If a group of numbers is arranged in order, the middle number is called the median. If there is no single middle number (this occurs when there is an even number of items), the median is found by taking the arithmetic mean of the two middle numbers.

**Example:** The median of 6, 8, 10, 12, and 14 is 10.

**Example:** The median of 6, 8, 10, 12, 14, and 16 is the arithmetic mean of 10 and 12.

$$\frac{10+12}{2} = \frac{22}{2} = 11$$

## Average of Evenly Spaced Number

The average of evenly spaced numbers is simply the average of the smallest number and the largest number. The average of all the integers from 13 to 77, for example, is the same as the average of 13 and 77:

$$\frac{13+77}{2} = \frac{90}{2} = 45$$

## Mode

The mode of a group of numbers is the number that appears most often. In other words, mod is of the highest frequency entity in a set of data.

**Examples:** The mode of 10, 5, 7, 9, 12, 5, 10, 5 and 9 is 5.

## Weighted Average

If some numbers among terms to be averaged occur more than once, the numbers must be given the appropriate weight. For example, if a student received four grades of 80 and 1 of 90, his average would not be the average of 80 and 90, but rather the average of 80, 80, 80, 80, and 90.

Set up a table listing the quantities, their respective weights, and their respective values.

- Multiply the value of each quantity by its respective weight.
- Add up these products.
- Add up the weights.
- Divide the sum of the products by the sum of the weights.

### Example:

Assume that the weights for the following subjects are: English 3, Physics 2, Mathematics 2, Chemistry 2, and Urdu 1. What would be the average of a student whose marks are: English 80, Physics 85, Mathematics 84, Chemistry 82, and Urdu 90?

### Solution:

Apply CAT table method for weighted entities:

| Subject | Weight | Marks | |
|---|---|---|---|
| English | 3 | 80 | 3×80=240 |
| Physics | 2 | 85 | 2×85=170 |
| Mathematics | 2 | 84 | 2×84=168 |
| Chemistry | 2 | 82 | 2×82=164 |
| Urdu | 1 | 90 | 1×90=90 |
| Totals | 10 | x | 832 |

$$10x = 832 \quad x = \frac{832}{10} = 83.2$$

Answer: Average = 83.2

### Note:

On the test, you might go directly to a list of the weighted amounts, here totaling 832, and divide by the number of weights; or you might set up a single equation.

### Example:

Mr. Najam drove for 6 hours at an average rate of 50 miles per hour and for 2 hours at an average rate of 60 miles per hour. Find his average rate for the entire trip.

### Solution:

$$\frac{6(50)+2(60)}{8} = \frac{300+120}{8} = \frac{420}{8} = 52\tfrac{1}{2}$$

Answer: $52\frac{1}{2}$

# SOLVED EXERCISE

**Directions:** You are given following questions from the topic, with four choices A through D. Select the choice that will answer the question best.
The answers and explanations of the questions have been given at the bottom of each question.

1. Mr. Kashif got an average of 50 in 6 tests. What should he get in the next test to attain the average of 60?
   A. 120 B. 60
   C. 100 D. 70

**Explanation:**
Total marks in 6 tests = 50 × 6 = 300. Total marks required in 7 tests (including next test) = 60 × 7 = 420. The marks in 7th test = Total marks in 7 tests - Total marks in 6 tests = 420 – 300 = 120
Answer (A)

2. The average income of a family of 6 members is Rs. 5000. The income of two of them is Rs. 12000. What is income of the remaining 3 persons?
   A. Rs. 12000 B. Rs. 90000
   C. Rs. 5000 D. Rs. 18000

**Explanation:**
Total income of the family = 6 × 5000 = 30000
Income of the three persons = 30000 – 12000 = 18000. Answer (D)

3. A clerk filed 73 forms on Monday, 85 forms on Tuesday, 54 on Wednesday, 92 on Thursday, and 66 on Friday. What was the average number of forms filed per day?
   A. 50 B. 95
   C. 84 D. 74

**Explanation:**
$\frac{73+85+54+92+66}{5} = 74$
Answer (D)

4. Find the arithmetic mean of 25.2, 13.5, 18.5, and 34.8
   A. 13 B. 23
   C. 27 D. 5

**Explanation:**
$\frac{25.2+13.5+18.5+34.8}{4} = 23$
Answer (B)

5. The average of x, y, z and 40 is 10. What is the average of x, y, and z.
   A. 10 B. 0
   C.2 D. 15

**Explanation:**
You are given $\frac{x+y+z+40}{4} = 10$ and you are to find $\frac{x+y+z}{3}$.
Solve the given $x + y + z = 0$ and hence $\frac{x+y+z}{3} = 0$. Answer (B)

6. A and B can do a job in 6 days. If A do the job alone he takes 10 days. What will be the time required by B to complete the job alone?
   A. 8 B. 6
   C. 15 D. 3

**Explanation:**
$\frac{1}{10} + \frac{1}{x} = \frac{1}{6}$

7. The average height of a class of 14 boys is 5.3 feet. A new boy is admitted to the class. The new average of height now becomes 5.25. What is the height of the new boy?
   A. 4.55 B. 5.0
   C. 6.0 D. 3.5

**Explanation:**
(15 × 5.25) - (14 × 5.3) = 4.55 sum of heights of 15 boys – sum of heights of 14 boys = height of 15th boy. Answer (A)

8. A man bought 20 used laptops at $200 each, 9 at $300 each, and 6 at $100 each. Find the average price per laptops.
   A. $250.55 B. $208.57
   C. $400.50 D. $380

**Explanation:**

Using CAT Table Method:

| | | |
|---|---|---|
| 20 | 200 | 4000 |
| 9 | 300 | 2700 |
| 6 | 100 | 600 |
| 35 | x | 7300 |

35 x = 7300 , x = 7300 ÷ 35 = 208.57

Answer (B)

9. Out of the 44 boys in a class, 9 are of the age of 10, 15 at the age of 9, and the rest are at the age of 8. Find the average age of the entire class.

A. 7.85 B. 8.75
C. 12.2 D. 14.35

**Explanation:**

Using CAT Table Method

| | | |
|---|---|---|
| 9 | 10 | 90 |
| 15 | 9 | 135 |
| 20 | 8 | 160 |
| 44 | x | 385 |

44 x = 385 , x = 8.75. Answer (B)

10. The population of 8 villages is 900, 750, 1100, 1050, 835, 1250,555, and 630. Find the population of ninth village if the average population of nine villages is 900.

A. 1200 B. 1065
C. 1030 D. 1800

**Explanation:**

Sum of 8 villages =
900+750+1100+1050+835+1250+555+630 =7070
Sum of Population of nine villages = 9 × 900 = 8100
Population of ninth village = 8100 – 7070 = 1030
Answer ( C)

# PROBABILITY

Probability is a mathematical expression of the likelihood of an event. The likelihood of any event is discussed in terms of all the possible outcomes. To express the probability of a given event, *x*, you would count the number of possible outcomes, count the number of outcomes that give you what you want, and arrange them in a fraction:

$$\text{Probability of x} = \frac{\text{number of outcomes that are x}}{\text{total number of possible outcomes}}$$

Furthermore, you can find the probability that something WILL NOT happen by subtracting the probability that it WILL happen from 1. For example, if the weatherman tells you that there is a 0.3 probability of rain today, then there must be a 0.7 probability that it won't rain, because 1- 0.3 = 0.7 . Figuring out the probability of any single event is usually simple. When you flip a coin, there are only two possible outcomes, heads and tails, the probability of getting heads is therefore 1 out of 2, or $\frac{1}{2}$ .When you roll a dice, there are six possible outcomes , 1 through 6; the odds of getting a 6 is therefore $\frac{1}{6}$ . The odds of getting an even result when rolling a dice are $\frac{1}{2}$ since there are three even results in six possible outcomes.

# SOLVED EXERCISE

**Directions:** You are given following questions from the topic, with four choices A through D. Select the choice that will answer the question best.
The answers and explanations of the questions have been given at the bottom of each question.

1. A number is selected at random from first thirty natural numbers. What is the chance that it is a multiple of either 3 or 13?
   A. 17/30 B. 2/5
   C. 11/30 D. 4/15

**Explanation:**
Multiple of 3: 3,6,9,12,15,18,21,24,27,30
Multiple of 13: 13,26
Total of all multiple is 12, therefore the probability is $\frac{12}{30}=\frac{2}{5}$. The right answer is B.

2. What is the probability of getting all six in a single throw of three unbiased dice?
   A. 1 / 6 B. 125 / 216
   C. 1 / 36 D. 1 / 216

**Explanation:**
Each dice has six faces. So, the sample space (total possibilities) is 6×6×6 = 216
Possible event having all dices facing 6 = 1

**Remember**

Every probability is a fraction.
The largest a probability can be is 1; a probability of 1 indicates total certainty.
The smallest a probability can be is 0, meaning that it's something that cannot happen.

So, the probability is $\frac{1}{216}$. The right answer is D.

3. What is the probability that a two-digit number selected at random will be a multiple of '3' and not a multiple of '5'?
   A. 2 / 15 B. 4 / 15
   C. 1 / 15 D. 4 / 90

**Explanation:**
Total number of two digit number =90
Total multiples of 3 = 30
Total multiples of 5 = 18
Every third of multiple of 5 is also the multiple of 3, therefore total number of multiple of 3 not the multiple of 5 = 24
Probability = $\frac{24}{90}=\frac{4}{15}$. The right answer is B.

4. When two dice are thrown simultaneously, what is the probability that the sum of the two numbers that turn up is less than 11?
   A. 5 / 6 B. 11 / 12
   C. 1 / 6 D. 1 / 12

**Explanation:**
Sample space = 36

Not allowed events = 5+6, 6+5, 6+6
Number of possible outcomes = 33
Probability = $\frac{33}{36}=\frac{11}{12}$. The right answer is B.

5. When 4 dice are thrown, what is the probability that the same number appears on each of them?
   A. 1/36 B. 1/18
   C. 1/216 D. 1/5

**Explanation:**
Sample space = 6×6×6×6 =1296
Possible outcomes = 6
Probability = $\frac{6}{1296}=\frac{1}{216}$. The right answer is c.

# اُردو گرائمر و قوائد

## (کثیر الانتخابی سوالات)

نوٹ: درست جواب پر (✓) کا نشان لگائیں۔

س: وہ حروف جن سے کوئی زبان بنتی ہے کیا کہلاتے ہیں؟
(الف) ✓ حروف تہجی (ب) حروف ابجد (د) حروف شمسی (ج) حروف قمری

س: اُردو زبان کے حروف تہجی (آ) سمیت کتنے ہیں؟
(الف) ✓ 38 (ب) 39 (د) 41 (ج) 43

س: وہ حروف جن پر "ال" عربی آتا ہے مگر پڑھا نہیں جاتا ان حروف کو کیا کہا جاتا ہے؟
(الف) حروف تہجی (ب) ✓ حروف شمسی (د) حروف ابجد (ج) حروف قمری

س: زبر، زیر، اور پیش کو کیا کہا جاتا ہے؟
(الف) جزم (ب) تنوین (د) ✓ حرکت (ج) تشدید

س: جس حرف پر حرکت آئے اسے کیا کہتے ہیں؟
(الف) جزم (ب) ✓ متحرک (د) تنوین (ج) تشدید

س: جزم کو کیا کہا جاتا ہے؟
(الف) جزم (ب) تنوین (د) حرکت (ج) ✓ سکون

س: جس حرف پر جزم آئے اُسے کیا کہا جاتا ہے؟
(الف) جزم (ب) ✓ ساکن (د) حرکت (ج) سکون

س: جب کسی حرف کے نیچے یا اوپر دو زبریں، دو زیریں یا دو پیش آئیں اسے کیا کہا جاتا ہے؟
(الف) جزم (ب) ✓ تنوین (د) حرکت (ج) تشدید

س: تشدید کی علامت بتائیے؟
(الف) ـَ (ب) ـُ (د) ـِ (ج) ✓ ـّ

س: جس حرف پر تشدید واقع ہو اُسے کیا کہتے ہیں؟
(الف) جزم (ب) تنوین (د) حرکت (ج) ✓ مشدد

س: دو ہم معنی الفاظ کیا کہلاتے ہیں؟
(الف) مخفف (ب) محذوف (د) متضاد (ج) ✓ مترادف

س: جن الفاظ کے معنی ایک دوسرے کے اُلٹ ہوں کیا کہلاتے ہیں؟
(الف) مخفف (ب) محذوف (د) ✓ متضاد (ج) مترادف

س: بعض اوقات کسی لفظ کو مختصر کر لیتے ہیں اس کو کیا کہا جاتا ہے؟
(الف) ✓ مخفف (ب) محذوف (د) متضاد (ج) مترادف

س: بعض اوقات لفظ میں سے کسی حرف کو حذف کر دیتے ہیں ایسے حرف کو کیا کہتے ہیں؟
(الف) مخفف (ب)✓ محذوف (ج) مترادف (د) متضاد

س: بامعنی لفظ یا کلمہ کی کتنی قسمیں ہوتی ہیں؟
(الف)✓ 3 (ب) 5 (ج) 9 (د) 7

س: وہ کلمہ جو کسی جاندار یا غیر جاندار چیز یا جگہ کا نام ہو کیا کہلاتا ہے؟
(الف) حرف (ب)✓ اسم (ج) کلمہ (د) فعل

س: وہ کلمہ جس سے کسی کام کا کرنا یا ہونا معلوم ہو اور اس میں کوئی زمانہ پایا جائے کیا کہلاتا ہے؟
(الف) حرف (ب) اسم (ج) کلمہ (د)✓ فعل

س: وہ کلمہ جو دوسرے کلموں کے ساتھ ملے بغیر پورے معنے نہ دے، یہ اسموں اور فعلوں کو آپس میں ملاتا ہے کیا کہلاتا ہے؟
(الف)✓ حرف (ب) اسم (ج) کلمہ (د) فعل

س: وہ اسم جو نہ خود کسی لفظ سے بنا ہو اور نہ اس سے کوئی دوسرا لفظ بنے کیا کہلاتا ہے؟
(الف)✓ اسم جامد (ب) اسم مصدر (ج) اسم مشتق (د) کوئی بھی نہیں

س: وہ اسم جس سے دوسرے بہت سے الفاظ تو مقرر قاعدوں کے مطابق بنتے ہوں مگر وہ خود کسی سے نہ بنا ہو کیا کہلاتا ہے؟
(الف) اسم جامد (ب)✓ اسم مصدر (ج) اسم مشتق (د) کوئی بھی نہیں

س: وہ اسم جو قاعدے کے مطابق مصدر سے بنایا جائے کیا کہلاتا ہے؟
(الف) اسم جامد (ب) اسم مصدر (ج)✓ اسم مشتق (د) کوئی بھی نہیں

س: لغت میں مصدر کے معنی کیا ہے؟
(الف)✓ صادر ہونے کی جگہ (ب) بیٹھنے کی جگہ (ج) کام کی جگہ (د) اُٹھنے کی جگہ

س: ایسا اسم جس میں کسی کام کا ہونا یا کرنا زمانے کے تعلق کے بغیر پایا جائے کیا کہلاتا ہے؟
(الف) جامد (ب)✓ مصدر (ج) مشتق (د) کوئی بھی نہیں

س: اُردو زبان میں مصدر کے آخر میں کیا آتا ہے؟
(الف) ہاں (ب) نہیں (ج)✓ نا (د) میں

س: بناوٹ کے لحاظ سے مصدر کی کتنی قسمیں ہیں؟
(الف) 1 (ب)✓ 2 (ج) 3 (د) 4

س: بناوٹ کے لحاظ سے مصدر کی کونسی دو قسمیں ہیں؟
(الف) اصلی یا وضعی (ب) جعلی یا غیر وضعی
(د)✓ الف اور ب دونوں (ج) کوئی بھی نہیں

س: ایسا مصدر جو خالص مصدری معنوں کے لیے ہی وضع کیا گیا ہو کیا کہلاتا ہے؟
(الف)✓ اصلی مصدر (ب) جعلی مصدر (ج) لازم مصدر (د) متعدی مصدر

س: ایسا مصدر جو دوسری زبانوں کے مصدر یا اسم پر مصدر کی علامت بڑھا کر بنایا جائے کیا کہلاتا ہے؟
(الف) اصلی مصدر (ب)✓ جعلی مصدر (ج) لازم مصدر (د) متعدی مصدر

س: معنوں کے لحاظ سے مصدر کی کتنی اقسام ہیں؟
(الف) 1 (ب) 3 (ج)✓ 2 (د) 4

س: وہ مصدر جس سے بننے والے فعل کے لیے صرف فاعل کی ضرورت ہو کیا کہلاتا ہے۔
(الف) اصلی مصدر (ب) جعلی مصدر (د)✓ لازم مصدر (ج) متعدی مصدر

س: وہ مصدر جس سے بننے والے فعل کے لیے مفعول کی بھی ضرورت ہو کیا کہلاتا ہے؟
(الف) اصلی مصدر (ب) جعلی مصدر (د) لازم مصدر (ج)✓ متعدی مصدر

س: مفعول کے لحاظ سے متعدی مصدروں کی کتنی اقسام ہیں؟
(الف) 1 (ب) 2 (د)✓ 3 (ج) 4

س: بناوٹ کے لحاظ سے متعدی مصدروں کی کتنی قسمیں ہیں؟
(الف) 2 (ب)✓ 3 (د) 5 (ج) 7

س: ایسے مصادر جو لازم سے قاعدے کے مطابق متعدی بنائے گئے ہوں کیا کہلاتے ہیں؟
(الف) متعدی الاصل (ب)✓ متعدی بالواسطہ (د) متعدی المتعدی (ج) کوئی بھی نہیں

س: معنوں کے لحاظ سے اسم کی کتنی اقسام ہیں؟
(الف) 4 (ب) 6 (د)✓ 2 (ج) 8

س: وہ اسم جو کسی خاص چیز یا شخص کے لیے بولا جائے کیا کہلاتا ہے؟
(الف)✓ اسم نکرہ (ب) اسم علم (د) اسم ضمیر (ج) اسم معرفہ

س: وہ اسم جو کسی عام چیز کا نام ہو کیا کہلاتا ہے؟
(الف) اسم نکرہ (ب) اسم علم (د) اسم ضمیر (ج)✓ اسم معرفہ

س: اسم معرفہ کی کتنی اقسام ہیں؟
(الف) 2 (ب) 3 (د)✓ 4 (ج) 5

س: وہ اسم جو کسی شخص کی پہچان کے لیے علامت کا کام دیتا ہے کیا کہلاتا ہے؟
(الف) اسم نکرہ (ب)✓ اسم علم (د) اسم ضمیر (ج) اسم معرفہ

س: وہ کلمہ جو کسی اسم کی جگہ استعمال ہو کیا کہلاتا ہے؟
(الف) اسم اشارہ (ب) اسم علم (د)✓ اسم ضمیر (ج) اسم موصول

س: اسم اشارہ کی کتنی قسمیں ہیں؟
(الف) 4 (ب) 6 (د)✓ 2 (ج) 8

س: وہ اسم جس سے کلام میں کسی چیز، جگہ یا شخص کی طرف اشارہ کرتے ہیں کیا کہلاتا ہے؟
(الف)✓ اسم اشارہ (ب) اسم علم (د) اسم ضمیر (ج) اسم موصول

س: وہ ناتمام اسم جس کا مطلب پورے جملے کے بغیر سمجھ میں نہیں آ سکتا کیا کہلاتا ہے؟
(الف) اسم اشارہ (ب) اسم علم (د) اسم ضمیر (ج)✓ اسم موصول

س: اسم علم کی کتنی اقسام ہیں؟
(الف) 2 (ب) 3 (د) 4 (ج)✓ 5

س: وہ نام جو پیار اور حقارت کی وجہ سے مشہور ہو جائے کیا کہلاتا ہے؟
(الف)✓ عرف (ب) خطاب (د) لقب (ج) کنیت

س: وہ نام جو حکومت کی طرف سے کسی شخص کو اس کی علمی یا قومی خدمات کے صلے میں دیا جاتا ہے کیا کہلاتا ہے؟
(الف) عرف (ب) ✓ خطاب (د) لقب (ج) کنیت

س: وہ نام جو کسی خاص وصف کی وجہ سے لوگوں میں مشہور ہو جاتا ہے کیا کہلاتا ہے؟
(الف) تخلص (ب) خطاب (د) ✓ لقب (ج) کنیت

س: وہ نام جو ماں باپ یا بیٹے بیٹی کے تعلق سے پکارا جائے کیا کہلاتا ہے؟
(الف) عرف (ب) خطاب (د) لقب (ج) ✓ کنیت

س: وہ مختصر نام جو شاعر اپنے اشعار میں اصلی نام کی بجائے استعمال کرتے ہیں کیا کہلاتا ہے؟
(الف) ✓ تخلص (ب) خطاب (د) لقب (ج) کنیت

س: اسم نکرہ کی کتنی اقسام ہیں؟
(الف) 3 (ب) 5 (د) 7 (ج) ✓ 6

س: وہ اسم جس سے ایک چیز کی حقیقت دوسری چیزوں سے الگ پہچانی جائے اور اس سے کوئی وصف مراد نہ ہو کیا کہلاتا ہے؟
(الف) ✓ اسم ذات (ب) اسم استفہام (د) اسم صفت (ج) اسم مصدر

س: وہ اسم جو کسی اسم کی چھوٹائی کو ظاہر کرے کیا کہلاتا ہے؟
(الف) اس ذات (ب) ✓ اسم مصغر (د) اسم فاعل (ج) اسم مصدر

س: وہ اسم جو کسی اسم کی بڑائی کو ظاہر کرے کیا کہلاتا ہے؟
(الف) اس ذات (ب) اسم مصغر (د) ✓ اسم مکبّر (ج) اسم فاعل

س: وہ اسم جس میں جگہ یا وقت کے معنی پائے جائیں کیا کہلاتا ہے؟
(الف) اسم مفعول (ب) اسم حاصل مصدر (د) اسم حالیہ (ج) ✓ اسم ظرف

س: وہ اسم جس میں جگہ یا مقام کا ذکر ہو کیا کہلاتا ہے؟
(الف) ✓ اسم ظرف مکان (ب) اسم ظرف زمان
(د) اسم ظرف مکان محدود (ج) اسم ظرف

س: وہ اسم جس میں زمانے یا وقت کا ذکر ہو کیا کہلاتا ہے؟
(الف) اسم ظرف مکان (ب) ✓ اسم ظرف زمان
(د) اسم ظرف مکان محدود (ج) اسم ظرف

س: ایسا اسم جس میں ظرفی صورت محدود ہو کیا کہلاتا ہے؟
(الف) اسم ظرف مکان (ب) اسم ظرف زمان
(د) ✓ ظرف مکان محدود (ج) کوئی بھی نہیں

س: وہ اسم جس میں اوزار کے معنی پائے جائیں یا کسی ایسی چیز کا نام ہو، جس کے ذریعے سے کوئی کام کیا جائے کیا کہلاتا ہے؟
(الف) ✓ اسم آلہ (ب) اسم صوت (د) اسم نکرہ (ج) اسم معرفہ

س: وہ اسم جو کسی جان دار یا غیر جاندار اسم کی آواز کو ظاہر کرے کیا کہلاتا ہے؟
(الف) اسم آلہ (ب) ✓ اسم صوت (د) اسم نکرہ (ج) اسم معرفہ

س: ایسے اسم کو کیا کہتے ہیں جو مصدر سے بنا ہو؟
(الف) اسم فاعل (ب) اسم مفعول
(د) ✓ اسم مشتق (ج) اسم حالیہ

س: وہ اسم مشتق جو کسی کام کے کرنے والے کو ظاہر کرے کیا کہلاتا ہے؟
(الف) ✓ اسم فاعل (ب) اسم مفعول (د) اسم مشتق (ج) اسم حالیہ

س: جو اسم فاعل کسی خاص قاعدے کے مطابق بنا ہوا سے کیا کہتے ہیں؟
(الف) ✓ اسم فاعل قیاسی (ب) اسم سماعی (د) اسم مشتق (ج) اسم حالیہ

س: وہ اسم مشتق جو اس شخص یا چیز کو ظاہر کرے جس پر کوئی کام واقع ہوا ہو کیا کہلاتا ہے؟
(الف) اسم نکرہ (ب) اسم معرفہ (د) ✓ اسم مفعول (ج) اسم حالیہ

س: جو اسم مفعول کسی خاص قاعدے کے مطابق ہوا سے کیا کہا جاتا ہے؟
(الف) اسم مفعول سماعی (ب) اسم معرفہ
(د) اسم مفعول (ج) ✓ اسم مفعول قیاسی

س: وہ اسم مشتق جو فاعل یا مفعول کی حالت کو ظاہر کرے کیا کہلاتا ہے؟
(الف) اسم فاعل (ب) اسم معاوضہ (د) اسم آلہ (ج) ✓ اسم حالیہ

س: وہ اسم مشتق جو کسی خدمت یا محنت کے معاوضہ کا نام ہو کیا کہلاتا ہے؟
(الف) اسم فاعل (ب) ✓ اسم معاوضہ (د) اسم آلہ (ج) اسم حالیہ

س: وہ کلمہ جو کسی شخص یا چیز کے نام کی جگہ استعمال کیا جاتا ہے کیا کہلاتا ہے؟
(الف) ✓ ضمیر (ب) صفت (د) عدد (ج) اشارہ

س: جس اسم کی جگہ ضمیر استعمال کیا جائے وہ کیا کہلاتا ہے؟
(الف) مرقع (ب) ✓ مرجع (د) متکلم (ج) متعلم

س: غائب شخص کے بارے میں گفتگو کے دوران جو اسم استعمال ہوتا ہے وہ کیا کہلاتا ہے؟
(الف) ضمیر حاضر یا مخاطب (ب) ضمیر متکلم (د) ✓ ضمیر شخصی (ج) ضمیر غائب

س: وہ ضمیر جو شخص کے لیے استعمال ہو کیا کہلاتا ہے؟
(الف) ضمیر حاضر یا مخاطب (ب) ضمیر متکلم (د) ضمیر شخصی (ج) ✓ ضمیر غائب

س: وہ ضمیر جو ایسے شخص کے لیے استعمال ہو جس سے گفتگو کی جا رہی ہو کیا کہلاتا ہے؟
(الف) ✓ ضمیر حاضر یا مخاطب (ب) ضمیر متکلم (د) ضمیر شخصی (ج) ضمیر غائب

س: جب ضمیر کسی جملے میں مفعول کی جگہ آئے تو اسے ضمیر کی کونسی حالت کہتے ہیں؟
(الف) حالت فاعلی (ب) ✓ حالت مفعولی (د) حالت اضافی (ج) کوئی بھی نہیں

س: جب ضمیر کسی جملے میں مضاف الیہ کی جگہ آئے تو اسے ضمیر کی کونسی حالت کہتے ہیں؟
(الف) حالت فاعلی (ب) حالت مفعولی (د) ✓ حالت اضافی (ج) کوئی بھی نہیں

س: ضمیر موصولہ کے بعد جو جملہ آتا ہے اس کو کیا کہتے ہیں؟
(الف) اشارہ (ب) صفت (د) رحم (ج) ✓ صلہ

س: وہ ضمیر جس کے ساتھ ہمیشہ ایک ایسا جملہ ہوتا ہے جس میں اس کے اسم کا بیان ہوتا ہے کیا کہلاتا ہے؟
(الف) ضمیر شخصی (ب) ضمیر استفہامیہ (د) ضمیر اشارہ (ج) ✓ ضمیر موصولہ

س: وہ ضمیر جو استفہام یعنی پوچھنے کے موقع پر بولا جاتا ہے کیا کہلاتا ہے؟
(الف) ✓ ضمیر استفہامیہ (ب) ضمیر اشارہ

(د) ضمیر صفت (ج) ضمیر موصولہ

س: وہ اسم ضمیر جس میں کسی شخص یا چیز کی طرف اشارہ کیا جائے کیا کہلاتا ہے؟
(الف) ✓ ضمیر اشارہ (ب) استفہام استخباری (د) استفہام انکاری (ج) استفہام اقراری

س: وہ اعداد جو تعداد کے علاوہ ترتیب کو بھی ظاہر کریں انہیں کیا کہتے ہیں؟
(الف) اعداد ذاتی (ب) ✓ اعداد ترتیبی (د) اعداد ضعفی (ج) اعداد کسری

س: ایسے اعداد جن سے کسی چیز کا کئی چند ہونا پایا جاتا ہے کیا کہلاتا ہے؟
(الف) اعداد ذاتی (ب) اعداد ترتیبی (د) ✓ اعداد ضعفی (ج) اعداد کسری

س: وہ اعداد جو اکائی کے حصوں کو ظاہر کرتے ہیں کیا کہلاتے ہیں؟
(الف) اعداد ذاتی (ب) اعداد ترتیبی (د) اعداد ضعفی (ج) ✓ اعداد کسری

س: وہ صفت عددی جس سے سب کا سب مراد ہو کیا کہلاتی ہے؟
(الف) ✓ اعداد استغراقی (ب) اعداد ترتیبی (د) اعداد ضعفی (ج) اعداد کسری

س: وہ اسم صفت جس سے چیزوں کی مقدار معلوم ہوتی ہے کیا کہلاتی ہے؟
(الف) صفت نسبتی (ب) صفت ذاتی (د) صفت عددی (ج) ✓ صفت مقداری

س: وہ صفت جس سے مقدار صحیح صحیح معلوم ہو کیا کہلاتی ہے؟
(الف) فاعل (ب) صفت (د) غیر معین یا مبہم (ج) ✓ معین

س: وہ صفت جس سے صحیح مقدار معلوم نہ ہو کیا کہلاتی ہے؟
(الف) فاعل (ب) صفت (د) ✓ غیر معین یا مبہم (ج) معین

س: جنسی اعتبار سے اسم کی کتنی قسمیں ہیں؟
(الف) 1 (ب) ✓ 2 (د) 3 (ج) 4

س: ایسا اسم جو نر کے معنوں میں استعمال ہو کیا کہلاتا ہے؟
(الف) تذکیر (ب) تانیث (د) ✓ مذکر (ج) مونث

س: ایسا اسم جو مادہ کے معنوں میں بولا جائے کیا کہلاتا ہے؟
(الف) تذکیر (ب) تانیث (د) مذکر (ج) ✓ مونث

س: جاندار اسماء کی تذکیر و تانیث کو کیا کہتے ہیں؟
(الف) ✓ حقیقی (ب) غیر حقیقی (د) فانی (ج) لافانی

س: مندرجہ ذیل اسماء میں کونسا اسم آتا ہے؟
نبی، فرشتہ، شہ بالا، ہم زلف، دیو، بھانڈ، بھڑوا، ہیجڑا، پہلوان، مہاجن
(الف) تذکیر (ب) تانیث (د) ✓ مذکر (ج) مؤنث

س: تمام پہاڑوں، سمندروں اور دریاؤں کے نام ..... ہیں۔
(الف) مؤنث (ب) ✓ مذکر (د) ضعفی (ج) کسری

س: وہ الفاظ جن کے دو مختلف معنی ہوں انہیں کیا کہا جاتا ہے؟
(الف) معنی والے (ب) معین (د) ✓ ذو معنی (ج) غیر معین

س: شمار اور گنتی کے لحاظ سے اسم کی کتنی قسمیں ہیں؟
(الف) 1 (ب)✓ 2 (د) 3 (ج) 4

س: وہ اسم جو صرف ایک چیز کے لیے استعمال کیا جائے کیا کہلاتا ہے؟
(الف)✓ واحد (ب) جمع (د) کسری (ج) ذاتی

س: وہ اسم جو ایک سے زیادہ چیزوں کے لیے استعمال کیا جائے کیا کہلاتا ہے؟
(الف) واحد (ب)✓ جمع (د) کسری (ج) ذاتی

س: تثنیہ بنانے کا قاعدہ یہ ہے کہ عربی واحد اسم کے آخر میں ..... زیادہ کر دیتے ہیں؟
(الف) "ان" (ب) نون غنہ "ں" (د) "ئیں" (ج)✓ "ین"

س: بعض اسم ایسے ہوتے ہیں جو بظاہر واحد معلوم ہوتے ہیں لیکن حقیقت میں بہت سے اسموں کا مجموعہ ہوتے ہیں، انہیں کیا کہا جاتا ہے؟
(الف)✓ اسم جمع (ب) اسم واحد (د) اسم فاعل (ج) اسم مفعول

س: جمع اور اسم جمع میں فرق یہ ہے کہ جمع کے مقابلے میں واحد ہوتا ہے لیکن اس جمع کا واحد نہیں ہوتا البتہ اسم جمع کی ..... بنائی جا سکتی ہے۔
(الف) واحد (ب)✓ جمع (د) کسری (ج) جمع الجمع

س: بعض اوقات اسموں کی جمع سے دوبارہ جمع بنالی جاتی ہے اسے کیا کہتے ہیں۔
(الف) واحد (ب) جمع (د) کسری (ج)✓ جمع الجمع

س: اسم مفعول کی جمع ..... کے وزن پر آتی ہے۔
(الف)✓ مفاعیل (ب) مفاعل (د) فاعل (ج) مفعول

س: اسم تفضیل کی جمع ..... کے وزن پر آتی ہے؟
(الف) مفاعیل (ب) مفاعل (د)✓ فاعل (ج) مفعول

س: اسم آلہ کی جمع ..... کے وزن پر آتی ہے۔
(الف)✓ مفاعیل (ب) مفاعل (د) فاعل (ج) مفعول

س: صفت مشتبہ کی جمع ..... کے وزن پر آتی ہے۔
(الف) مفاعیل (ب) مفاعل (د) فاعل (ج)✓ فعلا

س: اسم ظرف کی جمع ..... کے وزن پر آتی ہے۔
(الف) مفاعیل (ب)✓ مفاعل (د) فاعل (ج) مفعول

س: وہ کلمہ جس میں کسی کام کا کرنا یا ہونا زمانے کے تعلق کے ساتھ پایا جائے کیا کہلاتا ہے؟
(الف) مفعول (ب) مشتق (د)✓ فعل (ج) فاعل

س: زمانے کے لحاظ سے فعل کی کتنی قسمیں ہیں؟
(الف) 2 (ب)✓ 3 (د) 4 (ج) 5

س: وہ فعل جو گزرے ہوئے زمانے میں کسی کام کا کرنا یا ہونا ظاہر کرے کیا کہلاتا ہے؟
(الف)✓ فعل ماضی (ب) فعل حال (د) فعل مستقبل (ج) فعل لازم

س: وہ فعل ہے جو موجودہ زمانے میں کسی کام کا کرنا یا ہونا ظاہر کرے کیا کہلاتا ہے؟
(الف) فعل ماضی (ب)✓ فعل حال (د) فعل مستقبل (ج) فعل لازم

س: وہ فعل جو آنے والے زمانے میں کسی کام کا کرنا یا ہونا ظاہر کرے کیا کہلاتا ہے؟
(الف) فعل ماضی (ب) فعل حال (د)✓ فعل مستقبل (ج) فعل لازم

س: بناوٹ کے لحاظ سے فعل کی کتنی قسمیں ہیں
(الف) 4 (ب)✓ 6 (د) 8 (ج) 10

س: وہ فعل جو صرف فاعل کو چاہے کیا کہلاتا ہے؟
(الف) فعل ماضی (ب) فعل حال (د) فعل متعدی (ج)✓ فعل لازم

س: وہ فعل جو فاعل کے علاوہ مفعول کو بھی چاہے کیا کہلاتا ہے؟
(الف) فعل ماضی (ب) فعل حال (د)✓ فعل متعدی (ج) فعل لازم

س: وہ فعل جو کسی کام کا کرنا یا ہونا ظاہر کرے کیا کہلاتا ہے؟
(الف)✓ مثبت فعل (ب) منفی فعل (د) فعل معروف (ج) فعل مجہول

س: وہ فعل جو کسی کام کا نہ کرنا یا نہ ہونا ظاہر کرے کیا کہلاتا ہے؟
(الف) مثبت فعل (ب)✓ منفی فعل (د) فعل معروف (ج) فعل مجہول

س: وہ فعل جس کا فاعل معلوم ہو کیا کہلاتا ہے؟
(الف) فعل ماضی مطلق (ب) فعل ماضی قریب (د)✓ فعل معروف (ج) فعل مجہول

س: وہ فعل جس کا فاعل معلوم نہ ہو کیا کہلاتا ہے؟
(الف) فعل ماضی مطلق (ب) فعل ماضی قریب (د) فعل معروف (ج)✓ فعل مجہول

س: وہ فعل جس میں نزدیک کا گزرا ہوا زمانہ پایا جائے کیا کہلاتا ہے؟
(الف) فعل ماضی مطلق (ب)✓ فعل ماضی قریب (د) فعل معروف (ج) فعل مجہول

س: ماضی مطلق کے آخر میں ''ہے'' بڑھانے سے ماضی قریب کا ..... بن جاتا ہے؟
(الف) صیغہ جمع غائب (ب) صیغہ مؤنث غائب (د) صیغہ مذکر غائب (ج)✓ صیغہ واحد غائب

س: وہ فعل جس میں دور کا گزرا ہوا زمانہ پایا جائے کیا کہلاتا ہے؟
(الف) فعل ماضی شکیہ یا احتمالی
(د)✓ فعل ماضی بعید
(ب) فعل ماضی قریب
(ج) فعل ماضی استمراری

س: ماضی مطلق کے آخر میں ''تھا'' بڑھانے سے ماضی بعید کا ..... بن جاتا ہے۔
(الف) صیغہ جمع غائب (ب) صیغہ مؤنث غائب (د) صیغہ مذکر غائب (ج)✓ صیغہ واحد غائب

س: وہ فعل جس میں کام کا گزرے ہوئے زمانے میں جاری رہنا یا بار بار ہونا پایا جائے کیا کہلاتا ہے؟
(الف) فعل ماضی شکیہ یا احتمالی
(د) فعل ماضی بعید
(ب) فعل ماضی قریب
(ج)✓ فعل ماضی استمراری

س: وہ فعل جس میں کام کا ہونا گزشتہ زمانہ میں شرط یا تمنا کے ساتھ پایا جائے کیا کہلاتا ہے؟
(الف)✓ فعل ماضی تمنائی (ب) فعل ماضی مطلق (د) فعل حال (ج) فعل ماضی شکیہ

س: وہ مرکب جو عدد اور معدود سے مل کر بنے کیا کہلاتا ہے؟
(الف) ✓ مرکب عددی (ب) مرکب جاری (د) مرکب اشاری (ج) مرکب بدلی

س: وہ مرکب جو بدل اور مبدل سے مل کر بنے کیا کہلاتا ہے؟
(الف) مرکب عددی (ب) مرکب جاری (د) مرکب اشاری (ج) ✓ مرکب بدلی

س: اُردو میں محاورہ کے مطابق بہت سے لفظوں کے ساتھ ایک لفظ بولا جاتا ہے، جو بے معنی ہوتا ہے ایسے لفظ کو کیا کہا جاتا ہے؟
(الف) ✓ تابع مہمل (ب) تابع موضوع (د) ذوالحال (ج) عطف بیان و مبین

س: جملے میں جس شخص یا چیز کی بابت کچھ کہا جائے وہ ..... ہوتا ہے؟
(الف) مُسند (ب) ✓ مُسند الیہ (د) اسمیہ (ج) اسناد

س: جملے میں جس شخص یا چیز کی بابت جو کچھ کہا جائے وہ کیا کہلاتا ہے؟
(الف) ✓ مُسند (ب) مُسند الیہ (د) اسمیہ (ج) ✓ اسناد

س: جملے میں مسند اور مسند الیہ ہمیشہ کیا ہوتا ہے؟
(الف) فعل (ب) ✓ اسم (د) جملہ (ج) حرف

## اصناف شاعری و نثر:

نوٹ: درست جواب کے نیچے لائن موجود ہے۔

س: اللہ تعالیٰ کی تعریف کرنے کو کیا کہتے ہیں؟
(الف) نعت (ب) قصیدے (د) حمد (ج) کوئی بھی نہیں

س: رسول اللہ ﷺ کی تعریف کرنے کو کیا کہتے ہیں؟
(الف) نعت (ب) قصیدے (د) حمد (ج) کوئی بھی نہیں

س: ایسی صنف ہے جس میں کسی شخصیت کی توصیف و تحسین کی جائے یا مذمت کی جائے کیا کہلاتی ہے؟
(الف) قصیدہ (ب) غزل (د) مثنوی (ج) نظم

س: قصیدے کے پہلے شعر کو کیا کہتے ہیں؟
(الف) بند (ب) مطلع (د) مسمط (ج) مسدس

س: نظم میں کتنے قسم کے مضمون ہوتے ہیں؟
(الف) 1 (ب) 2 (د) 3 (ج) 4

س: ایسی نظم جس میں ہر شعر الگ الگ قافیے میں ہوتا ہے کیا کہلاتی ہے؟
(الف) قصیدہ (ب) مثنوی (د) نظم (ج) بند

س: ایسے مجموعہ اشعار جن کا قافیہ تو قصیدے کی طرح ایک ہی ہو لیکن ہر شعر یا مضمون الگ اور مکمل ہو، اور شاعر اپنے ''حقیقی'' یا ''مجازی''، عشق کے معاملات بیان کر سکے کیا کہلاتا ہے؟
(الف) غزل (ب) نظم (د) مثنوی (ج) بند

س: غزل کے پہلے شعر کے دونوں ہم قافیہ مصرعے کیا کہلاتے ہیں؟
(الف) غزل (ب) مطلع (ج) نظم (د) مثنوی

س: غزل میں کم سے کم اشعار کی تعداد کتنی ہوتی ہے؟
(الف) 3 (ب) 5 (ج) 9 (د) 7

س: اُردو ادب کی کس شاعرانہ صنف میں تمام اشعار میں ایک ہی مضمون بیان کیا جاتا ہے؟
(الف) قطعہ (ب) مطلع (ج) مسدس (د) مخمس

س: چار مصرعوں اور ایک مخصوص وزن کی مکمل نظم جس کا پہلا، دوسرا اور چوتھا مصرع ہم قافیہ ہو، کیا کہلاتی ہے؟
(الف) نظم (ب) غزل (ج) بند (د) رباعی

س: وہ شئے جسے کسی مشترک وصف یا حالت کی بنا پر کسی دوسری شئے سے تشبیہ دی جائے اُردو ادب میں کیا کہلاتی ہے؟
(الف) مشبہ (ب) مشبہ بہ (ج) حرف تشبیہ (د) وجہ تشبیہ

س: وہ مقصد جس کی وجہ سے ایک شئے کو دوسری شئے سے تشبیہ دی جاتی ہے کیا کہلاتی ہے؟
(الف) غرض تشبیہ (ب) مشبہ (ج) حرف تشبیہ (د) وجہ تشبیہ

س: نازکی اس کے لب کی کیا کہیے
پنکھڑی اک گلاب کی سی ہے
یہ شعر کس شاعر کا ہے؟
(الف) میر (ب) غالب (ج) فیض (د) اقبال

س: نازکی اس کے لب کی کیا کہیے
پنکھڑی اک گلاب کی سی ہے
اس شعر میں ''لب'' تشبیہ کے کون سے ارکان میں شامل ہے؟
(الف) غرض تشبیہ (ب) مشبہ بہ (ج) حرف تشبیہ (د) وجہ تشبیہ

س: نازکی اس کے لب کی کیا کہیے
پنکھڑی اک گلاب کی سی ہے
اس شعر میں گلاب کی ''پنکھڑی'' تشبیہ کے کون سے ارکان میں شامل ہے؟
(الف) غرض تشبیہ (ب) مشبہ بہ (ج) حرف تشبیہ (د) وجہ تشبیہ

س: نازکی اس کے لب کی کیا کہیے
پنکھڑی اک گلاب کی سی ہے
اس شعر میں نازکی تشبیہ کے کون سے ارکان میں شامل ہے؟
(الف) غرض تشبیہ (ب) مشبہ بہ (ج) حرف تشبیہ (د) وجہ تشبیہ

س: استعارہ کے لغوی معنی بتایئے؟
(الف) کسی چیز کو دیکھنا (ب) اُدھار لینا (ج) حقیقی معانی (د) کوئی بھی نہیں

س: اُردو ادب میں کسی لفظ کو حقیقی معنوں کی بجائے مجازی معنوں میں ایسے استعمال کرنا ہے کہ اس کے حقیقی اور مجازی معنوں میں
تشبیہ کا تعلق موجود ہو کیا کہلاتا ہے؟
(الف) استعارہ (ب) تشبیہ
(د) الف اور ب دونوں (ج) کوئی بھی نہیں

س: وہ شخص یا شئے جس سے کوئی لفظ مستعار لیا گیا ہو کیا کہلاتا ہے؟
(الف) مستعار لہ (ب) مستعار الیہ (د) وجہ جامع (ج) وجہ تشبیہ

س: وہ مشترک خوبی، صفت یا حالت جس کی بنا پر ایک چیز بول کر دوسری مراد لی جائے کیا کہلاتی ہے؟
(الف) مستعار لہ (ب) مستعار الیہ (د) وجہ جامع (ج) وجہ تشبیہ

س: تلمیح کے لغوی معنی بتایئے؟
(الف) اشارہ کرنا (ب) سرسری نگاہ ڈالنا
(د) الف اور ب دونوں (ج) کوئی بھی نہیں

س: مشرق سے سورج کے نکلنے کا مقام اور چاند یا سورج کے نمودار ہونے کی جگہ کو لغوی طور پر کیا کہتے ہیں؟
(الف) غروب (ب) طلوع (د) آفتاب (ج) چمکنا

س: اردو کے پہلے افسانوی مجموعہ کا نام بتایئے؟
(الف) خاقانی ہند (ب) فسانہ عجائب (د) سوز وطن (ج) زیر لب

س: محمد حسین آزاد نے کس کے بارے میں کہا تھا؟
''ان کو اردو زبان پر وہی دعویٰ پہنچتا ہے جو کہ ارسطو کو فلسفہ و منطق پر ہے۔''
(الف) غالب (ب) میر انیس (د) بہادر شاہ ظفر (ج) خان آرزو

س: اردو کے کس شاعر کا مقدمہ ایک علیحدہ تصنیف کی حیثیت اختیار کر گیا ہے؟
(الف) بہادر شاہ ظفر
(ب) غالب
(ج) مولانا الطاف حسین حالی (مقدمہ شعر و شاعری)
(د) محمد حسین آزاد

# شاعروں اور ادیبوں کے اصل نام

| قلمی نام | اصل نام | قلمی نام | اصل نام |
|---|---|---|---|
| آثم فردوسی | میاں عبدالحمید | احمد راہی | غلام احمد |
| آرزو لکھنوی | سید انور حسین | آزاد جمال دینی | واحد بخش |
| اختر شیرانی | محمد داؤد خان | آسی خانپوری | میاں نیاز احمد |
| اختر کاشمیری | محمد طفیل | سچل سرمست | عبدالوہاب |
| اختر مونگا | غلام احمد | آصف شاہکار | اعجاز حسین |
| اختر ہاشمی | محمد جلیل | آغا بابر | سجاد حسین |
| اختر وارثی | عبدالعزیز | اختر ہوشیار پوری | عبدالسلام |
| آئی آئی قاضی | امداد امام علی قاضی | ادیب سہیل | سید محمد ظہور الحق |
| ابن انشاء | شیر محمد خان | ارشد جالندھری | غلام رسول |
| ابن حنیف | مرزا ظریف بیگ | ارشد میر | ارشد حسین |
| ابن صفی | اسرار احمد | اثر جلیلی | سید عبدالاحد |
| اسلم راہی | محمد اسلم ملک | اثر صہبائی | عبدالسمیع پال |
| افسر ماہ پوری | ظہیر عالم صدیقی | افضل منہاس | وزیر احمد |
| انجم رومانی | فضل دین | تاجور نجیب آبادی | احسان اللہ خاں |
| انجم وزیر آبادی | محمد جان | تبسم رضوانی | حبیب اللہ |
| تبسم کاشمیری | ڈاکٹر محمد صالحین | تحسین فراقی | منظور اختر |
| انور سدید | محمد انور الدین | تنویر بخاری | فقیر محمد |
| انیس ناگی | یعقوب علی | تنویر سپرا | محمد حیات |
| ایاز شیخ | شیخ مبارک علی | ثاقب حزیں | محمد غلام مصطفی |
| باقی صدیقی | سائیں محمد افضل | ثمر جالندھری | محمد شریف |
| جاذب قریشی | محمد صابر | جان کاشمیری | محمد نصیر |
| جاوید سوز | فتح محمد | جعفر بلوچ | غلام جعفر |
| پریشان خٹک | محمد غم جاں | جلیل قدوائی | جلیل احمد |

| Urdu | | | |
|---|---|---|---|
| پطرس بخاری | سید احمد شاہ | جمال پانی پتی | گلزار احمد |
| پیام شاہ جہانپوری | محمد عین خاں | جمیل جالبی | محمد جمیل خان |
| جوش ملیح آبادی | شبیر حسن | تابش انوری | سردار علی سید |
| تابش دہلوی | مسعود الحسن | تابش صدیقی | جماعت علی |
| حافظ امرتسری | محمد شریف | حافظ بصیر پوری | محمد منظور حسین |
| روحی کنجاہی | امر الٰہی | حافظ لدھیانوی | محمد منظور حسین |
| حبیب جالب | حبیب احمد | رئیس امروہوی | سعید محمد مہدی |
| زبیر کنجاہی | محمد صادق | حزیں کاشمیری | معین الدین |
| ساقی گجراتی | مختار احمد | حسرت امرتسری | محمد یونس |
| سجاد حارث | ادریس احمد خاں | حسن عسکری | محمد حسن |
| سحر انصاری | انور مقبول | حسین سحر | خادم حسین |
| سرور اکبر آبادی | سید نور محمد | حکیم ناصر | شیر محمد |
| خاطر غزنوی | محمد ابراہیم بیگ | سرور بجنوری | محمد یونس |
| خالد بزمی | محمد یونس | اشرف صبوحی | ولی اشرف |
| سہیل بخاری | محمود نقوی | سیدہ حنا | سیدہ سکینہ اختر |
| خلیل قریشی | غلام رسول | خیال مینائی | نبی حسن |
| شاعر لکھنوی | حسین پاشا | دلشاد کلانچوی | عطا محمد |
| شبنم رومانی | عظیم محمد بیگ | راجا رسالو | محمد صادق |
| شرر نعمانی | فراست علی خان | راز کاشمیری | عبدالمنان |
| شکیب جلالی | حسن رضوی | راشد نام | نذر محمد |
| شورش کاشمیری | عبدالکریم | راغب مراد آبادی | سید اصغر حسین |
| شوکت تھانوی | محمد عمر | شہرت بخاری | محمد انور |
| فارغ بخاری | احمد شاہ | شہزاد منظر | ابراہیم عارف |
| فرمان فتح پوری | سید دلدار علی | فلک پیما | عبدالعزیز |
| صبا اکبر آبادی | محمد امیر | صحرائی گورداسپوری | عبدالرحیم |
| قتیل شفائی | اورنگ زیب | صدیق سالک | محمد صدیق |

| | | | |
|---|---|---|---|
| قدر آفاقی | بشیر احمد | | |
| قمر اجنالوی | عبدالستار | صہبا اختر | اختر علی رحمت |
| طالب ہاشمی | محمد یونس | قمر جلالوی | محمد حسین |
| کوثر نیازی | محمد حیات | طاہر تونسوی | حفیظ الرحمن |
| گوہر ملیسانی | طفیل محمد | عارف بٹالوی | گلزار احمد |
| گوہر ہوشیار پوری | محمد اشرف | عرش صدیقی | ارشاد الرحمن |
| عشرت رحمانی | امتیاز علی خاں | لطیف ساحل | محمد خالد |
| عطش درانی | عطاء اللہ خاں | حاجی لق لق | عطا محمد چشتی |
| عقیل روبی | غلام حسین سوز | ماہر القادری | منظور حسین |
| محسن بھوپالی | عبدالرحمن | مجنوں گورکھپوری | احمد صدیق |
| محسن نقوی | غلام عباس | عندلیب شادانی | وجاہت حسین |
| محشر بدیوانی | فاروق احمد | عین الحق فرید کوٹی | فضل الٰہی |
| نسیم امروہوی | سید قاسم رضا | مشفق خواجہ | عبدالحی |
| نسیم حجازی | محمد شریف | ملا واحدی | سید محمد ارتقی |
| منصور تابش | منظور احمد | نشتر جالندھری | محمد سمیع |
| منو بھائی | منیر احمد | نظیر لدھیانوی | محمد عبدالحکیم |
| مرزا ادیب | دلاور علی | نعیم صدیقی | اصغر حسین |
| میکش | مرتضیٰ احمد | نادر جاجوی | فضل الرحمن |
| نیر واسطی | علی احمد | نازش حیدری | امانت علی |
| وقار راشدی | عبدالستار | وفا صدیقی | محمد خورشید حسین |
| نجیب احمد | محمد طفیل | ندیم ماری | وصی احمد |
| ناسخ | شیخ امام بخش | آتش | فقیر محمد |
| ذوق | محمد ابراہیم | آرزو | خواجہ حیدر علی |
| راسخ | شیخ غلام علی | حسرت موہانی | محمد حسین |
| داغ | نواب مرزا خاں | آغا شاعر دہلوی | فضل الحسن |
| دبیر | مرزا سلامت علی | ابوالکلام آزاد | آغا مظفر بیگ قزلباش |
| | | | محی الدین احمد |

# اہم کردار

| نام کردار | خالق | کتاب کا نام |
|---|---|---|
| ایلس | لیوس کیرول | ایلس ان ونڈر لینڈ |
| اینا کیرینا | لیوٹالسٹائی | اینا کیرینا |
| بروٹس | شیکسپیئر | جولیس سیزر |
| بیٹرس | شیکسپیئر | جولیس سیزر |
| ٹارزن | ایڈگر راس بروز کی | --- |
| جیکس | شیکسپیئر | ایزیولا ئیک اٹ |
| جیمز بانڈ | ائن فلیمنگ | --- |
| ڈاکٹر فاسٹس | مارلو | ڈاکٹر فاسٹس |
| ڈاکٹر واٹسن | کونن ڈائل | ایڈونچر آف شرلک ہومز |
| ڈیوڈ کوپر فیلڈ | چارلس ڈکنز | ڈیوڈ کوپر فیلڈ |
| وشیانتا | کالیداس | شکنتلا |
| ڈریکولا | برام اسٹوکر | ڈاکٹر ژواگو |
| سام ویلر | چارلس ڈکنز | پک وک پیپرز |
| شرلاک ہومز | کونن ڈائل | ایڈونچرز آف شرلک ہومز |
| شائی لاک | شیکسپیئر | مرچنٹ آف وینس |
| کم | کپلنگ | کم |
| قلوپطرا | شیکسپیئر | انٹونی قلوپطرا |
| گورا | رابندر ناتھ ٹیگور | کنگ لیئر |
| میرنڈا | شیکسپیئر | ٹیمپسٹ |
| میکبتھ | شیکسپیئر | میکبتھ |
| میلا پراپ | شیریڈن | دی رائیول |
| ہیکٹر | ہومر | ایلیڈ |
| ہیملٹ | شیکسپیئر | ہیملٹ |

| | | |
|---|---|---|
| اصغری اور اکبری | ڈپٹی نذیر احمد | |
| حاتم طائی | حیدر بخش حیدری | مراۃ العروس |
| ظاہر دار بیگ | ڈپٹی نذیر احمد | آرائش محفل |
| آزاد | رتن ناتھ سرشار | توبۃ النصوح |
| سگ پرست | میر امن | فسانہ آزاد |
| قمرن چوڑی والی | پنڈت رتن ناتھ سرشار | باغ بہار |
| کریمن بوا | خدیجہ مستور | فسانہ آزاد |
| حاجی بغلول | منشی سجاد حسن | آنگن |
| قاضی جی | شوکت تھانوی | اودھ پنچ |
| رمضانی | مجید لاہوری | سیلاب تبسم |
| سلمٰی | اختر شیرانی | --- |
| محسن بی | ڈپٹی نذیر احمد | --- |
| شیخ علی وجودی | عبدالحلیم شرر | مراۃ العروس |
| گیتی آراء | الطاف فاطمہ | فردوس بریں |
| قاضی عبدالودود | مشتاق یوسفی | دستک نہ دو |
| خوجی | رتن ناتھ سرشار | خاکم بدھن |
| تلقین شاہ | اشفاق احمد | فسانہ آزاد |
| باباجی | اشفاق احمد | --- |
| صفدر یاسین | الطاف فاطمہ | زاویہ |
| | | دستک نہ دو |

# اردو ادب میں اولیت

| نمبر شمار | | | | | |
|---|---|---|---|---|---|
| نمبر شمار | | | | | |
| .1 | اردو کے پہلے شاعر | مسعود سعد سلمان | .2 | اردو کے پہلے نثر نگار | شاہ راجو |
| .3 | اردو کی پہلی کتاب | رسالہ شاہ راجو | .4 | ''سب رس'' کے خالق | ملا وجہی |
| .5 | اردو کے پہلے رباعی گو | ملا وجہی | .6 | اردو کی پہلی مثنوی | کدم راؤ پدم راؤ |
| .7 | برصغیر کے پہلے نوبل انعام یافتہ شاعر | رابندر ناتھ ٹیگور | .8 | پہلے صاحب دیوان شاعر | قلی قطب |
| .9 | اردو کی پہلی شاعرہ | ماہ لقا چندہ بائی | .10 | اردو کی پہلی صاحب دیوان شاعرہ | ماہ لقا چندہ بائی |
| .11 | اردو نظم کے پہلے شاعر | نظیر اکبر آبادی | .12 | جدید نظم کے بانی | مولانا الطاف حسین حالی |
| .13 | قومی شاعری کے بانی | نظیر اکبر آبادی | .14 | فطری شاعری کے بانی | مولانا الطاف حسین حالی |
| .15 | تنقید کی پہلی کتاب | مقدمہ شعر و شاعری | .16 | اردو کے جدید مشاعرے کے بانی | مولانا محمد حسین آزاد |
| .17 | اردو سوانح نگاری کا بانی | الطاف حسین حالی | .18 | اردو کے پہلے تذکرہ نگار | میر تقی میر |
| .19 | اردو تذکرہ کی پہلی کتاب | نکات الشعراء | .20 | جدید غزل کے بانی | مولانا حسرت موہانی |
| .21 | اردو کے پہلے مورخ | رام بابو سکسینہ | .22 | اردو تاریخ کی پہلی کتاب | تاریخ اردو ادب |
| .23 | قرآن پاک کے پہلے اردو مترجم | شاہ عبدالقادر | .24 | خطوط نگاری کے بانی | مرزا غالب |
| .25 | جدید نثر کے بانی | مرزا غالب | .26 | اردو کا پہلا اخبار | جام جہاں نما |
| .27 | اردو کے پہلے ہجو گو | رفیع الدین سودا | .28 | اردو کے پہلے قصیدہ گو | فضلی |
| .29 | اردو کے پہلے صوفی شاعر | خواجہ میر درد | .30 | اردو کے پہلے مرثیہ گو | فضلی |
| .31 | اردو کے پہلے گرائمر نگار | انشا اللہ خان انشاء | .32 | اردو کی پہلی گرائمر | دریائے لطافت |
| .33 | اردو کی پہلی ناول نگار خاتون | رشیدۃ النساء | .34 | اردو کے پہلے ناول نگار | ڈپٹی نذیر احمد |
| .35 | اردو کا پہلا ناول | مراۃ العروس | .36 | اردو کے پہلے افسانہ نگار | سجاد حیدر یلدرم |
| .37 | اردو کا پہلا افسانہ | نشہ کی ترنگ | .38 | آزاد نظم کے بانی | ن م راشد |
| .39 | اردو کی پہلی مطبع کتاب | انجیل | .40 | اردو مسدس لکھنے والے پہلے شاعر | رفیع الدین سودا |
| .41 | خواجہ سراؤں پر پہلی کتاب | سیف الرحمن رانا | .42 | اردو کے پہلے مزاحیہ ناول نگار | رتن ناتھ سرشار |

| | | | | | |
|---|---|---|---|---|---|
| .43 | سعودی عرب کا پہلا اردو شاعر | نعیم حامد علی | .44 | پاکستان کی پہلی خاتون شاعرہ | ادا جعفری |
| .45 | بچوں کے پہلے اردو شاعر | اسماعیل میرٹھی | .46 | اردو کے پہلے مضمون نگار | سرسید احمد خان |
| .47 | اردو زبان کے پہلے ہندو شاعر | نام دیو | .48 | اردو میں انشائیہ نگاری کا آغاز کرنے والے | سرسید احمد خان |
| .49 | اردو کا پہلا ڈرامہ نگار | امانت لکھنوی | .50 | اردو کا پہلا ڈرامہ | اندر سبھا |
| .51 | اردو کی طویل ترین نظم | مدو جزر اسلام | .52 | مدہ جزر اسلام کا دوسرا نام | مسدس حالی |
| .53 | دنیا کی طویل ترین نظم | مہابھارت | .54 | پہلے پنجابی شاعر | بابا فرید گنج شکر |
| .55 | پشتو کے پہلے شاعر | امیر کروڑ | .56 | اردو کے پہلے سانٹ کے شاعر | عظیم الدین |
| .57 | اردو کی پہلی سانٹ نظم کا نام | فریاد عظیم | .58 | اردو کے پہلے خاکہ نگار | مرزا فرحت اللہ بیگ |
| .59 | اردو کے پہلے رپورتاژ نگار | کرشن چندر | .60 | پاکستان کا پہلا انشائیہ نگار | ڈاکٹر وزیر آغا |
| .61 | اردو کا پہلا سفر نامہ نگار | یوسف کمبل پوش | .62 | اردو کا پہلا سفر نامہ | عجائبات فرنگ |
| .63 | علامہ اقبال کی پہلی نظم | ہمالہ | .64 | اردو غزل کا پہلا باقاعدہ شاعر | قلی قطب شاہ |
| .65 | اردو کی پہلی داستان | سب رس | .66 | اردو کے پہلے تاریخی ناول نگار | عبدالحلیم شرر |
| .67 | اردو میں پہلے جاسوسی ناول نگار | ظفر زیدی | | | |

# القابات۔خطابات

| نمبر شمار | | نمبر شمار | | نمبر شمار | |
|---|---|---|---|---|---|
| .1 | حکیم الامت | علامہ اقبال | .2 | ترجمان حقیقت | علامہ اقبال |
| .3 | شاعر مشرق، ترجمان اسلام | علامہ اقبال | .4 | مجدد عصر | علامہ اقبال |
| .5 | مرشد سیاسی | علامہ اقبال | .6 | اردو شاعری کا باوا آدم | ولی دکنی |
| .7 | بچوں کا شاعر | اسماعیل میرٹھی | .8 | شہنشاہ ظرافت | اکبر الہ آبادی |
| .9 | شاعر مزدور | احسان دانش | .10 | طوطی ہند | امیر خسرو |
| .11 | رئیس المتغزلین | حسرت موہانی | .12 | بابائے اردو | مولوی عبدالحق |
| .13 | لسان العصر | اکبر الہ آبادی | .14 | آقائے اردو | مولانا محمد حسین آزاد |
| .15 | خاقانی ہند | مولانا ابراہیم ذوق | .16 | خدائے سخن | میر تقی میر |
| .17 | غالب شکن | یگانہ چنگیزی | .18 | حیوان ظریف | مرزا غالب |
| .19 | اردو کا عمر خیام | ریاض خیر آبادی | .20 | رند پارسا | ریاض خیر آبادی |
| .21 | جدید غزل کا امام | مولانا حسرت موہانی | .22 | آبروئے غزل | مولانا حسرت موہانی |
| .23 | اردو کا چاسر | ولی دکنی | .24 | نجم الدولہ | مرزا غالب |
| .25 | دبیر الملک | مرزا غالب | .26 | مزاحیہ شاعری کا امام | اکبر الہ آبادی |
| .27 | اردو کا باغی شاعر | مرزا غالب | .28 | نظام جنگ | مرزا غالب |
| .29 | اردو ڈرامے کا شیکسپیئر | آغا حشر کاشمیری | .30 | سید الاحرار | حسرت موہانی |
| .31 | پنجابی کا شیکسپیئر | وارث شاہ | .32 | جدید شاعری کا امام | مولانا الطاف حسین |
| .33 | بلبل ہند | مرزا داغ دہلوی | .34 | انقلابی شاعر | قاضی نذر الاسلام |
| .35 | قلم کا مزدور شاعر | افضل پرویز | .36 | اردو ادب کا منگلا ڈیم | احمد ندیم قاسمی |
| .37 | اردو کا رومان شاعر | اختر شیرانی | .38 | اردو کا ہومر | میر ببر علی انیس |
| .39 | اردو کا برنارڈ شاہ | میاں عبدالعزیز | .40 | خیام الہند | حیدر دہلوی |
| .41 | شاعر اعظم | جوش ملیح آبادی | .42 | شاعر شباب | جوش ملیح آبادی |
| .43 | اردو کا مارلو | آغا حشر کاشمیری | .44 | اردو کا ٹالسٹائی | کرشن چندر |
| .45 | مصور غم | راشد الخیری | .46 | مصور حقیقت | علامہ اقبال |
| .47 | ڈپٹی نذیر احمد کا جانشین | راشد الخیری | .48 | عورتوں کا سرسید | ڈپٹی نذیر احمد |
| .49 | یاسیت کا امام | فانی بدایونی | .50 | قنوطی شاعر | فانی بدایونی |

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|---|---|---|---|---|---|
| .51 | اردو کا ئی ایس ایلیٹ | ولی دکنی | .52 | استعاروں کا بادشاہ | نجم الدین آبرو |
| .53 | فردوسی اسلام | حفیظ جالندھری | .54 | شاعر اسلام | حفیظ جالندھری |
| .55 | اردو کا والٹر سکاٹ | عبدالحلیم شرر | .56 | لسان قوم | صفی لکھنوی |
| .57 | پشتو کا باوا آدم | رحمان بابا | .58 | بابائے پنجابی | ڈاکٹر فقیر محمد فقیر |
| .59 | عوامی شاعر | نظیر اکبر آبادی | .60 | مصور فطرت | خواجہ حسن نظامی |
| .61 | اردو کا شیلے | اسرار الحق مجاز | .62 | بابائے بلوچی | آزاد جمال بلوچ |
| .63 | پاکستان کا ساحر لدھیانوی | فتیل شفائی | .64 | سریلے بول کا شاعر | عظمت اللہ خاں |
| .65 | اردو کی جین آسٹن | بشریٰ رحمن | .66 | بیسویں صدی کا میر درد | اصغر گونڈوی |
| .67 | جرمن ادب کا بادشاہ | گوئٹے | .68 | اردو کا چارس ڈکنز | رتن ناتھ سرشار |
| .69 | تصوف کا سرخیل | خواجہ میر درد | | | |

# اردو کی اہم کتب

| نمبر شمار | کتب | مصنف | نمبر شمار | کتب | مصنف |
|---|---|---|---|---|---|
| .1 | جیل کے دن جیل کی راتیں | ابراہیم جلیس | .2 | چالیس کروڑ بھکاری | ابراہیم جلیس |
| .3 | چاند نگر | ابن انشاء | .4 | چلتے ہو تو چین کو چلیے | ابن انشاء |
| .5 | آوارہ گرد کی ڈائری | ابن انشاء | .6 | ابن بطوطہ کے تعاقب میں | ابن انشاء |
| .7 | دنیا گول ہے | ابن انشاء | .8 | جاناں جاناں | احمد فراز |
| .9 | ریزہ ریزہ | احمد فراز | .10 | تنہا تنہا | احمد فراز |
| .11 | میرے خواب | احمد فراز | .12 | محبت اور نفرت | اختر حسین رائے پوری |
| .13 | فردوس نغمہ | اختر انصاری اکبر آبادی | .14 | لالہ طور | اختر شیرانی |
| .15 | طیور آوارہ | اختر شیرانی | .16 | صبح بہار | اختر شیرانی |
| .17 | نوائے کارگر | احسان دانش | .18 | آتش خاموش | احسان دانش |
| .19 | جہان دانش | احسان دانش | .20 | گورستان | احسان دانش |
| .21 | لیل و نہار | اشفاق احمد | .22 | گڈریا | اشفاق احمد |
| .23 | ایک محبت سو افسانے | اشفاق احمد | .24 | اجلے پھول | اشفاق احمد |

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|---|---|---|---|---|---|
| .25 | مہمان بہار | اشفاق احمد | .26 | ننگے پاؤں | اشفاق احمد |
| .27 | سیب کا درخت | احمد شاہ بخاری پطرس | .28 | ہاسٹل میں پڑھنا | احمد شاہ بخاری پطرس |
| .29 | سویرے جو کل آنکھ میری کھلی | احمد شاہ بخاری پطرس | .30 | لاہور کا جغرافیہ | احمد شاہ بخاری پطرس |
| .31 | نشاط روح | اصغر گونڈوی | .32 | سرود زندگی | اصغر گونڈوی |
| .33 | رم جھم | احمد ندیم قاسمی | .34 | جلال و جمال | احمد ندیم قاسمی |
| .35 | شعلہ گل | احمد ندیم قاسمی | .36 | دشت وفا | احمد ندیم قاسمی |
| .37 | چوپال | احمد ندیم قاسمی | .38 | بگولے | احمد ندیم قاسمی |
| .39 | سناٹا | احمد ندیم قاسمی | .40 | کپاس کا پھول | احمد ندیم قاسمی |
| .41 | گھر سے گھر تک | احمد ندیم قاسمی | .42 | انگارے | احمد علی |
| .43 | حیات جاوید | الطاف حسین حالی | .44 | حیات سعدی | الطاف حسین حالی |
| .45 | مقدمہ شعر و شاعری | الطاف حسین حالی | .46 | یادگار غالب | الطاف حسین حالی |
| .47 | مسدس حالی | الطاف حسین حالی | .48 | نشاط امید | الطاف حسین حالی |
| .49 | برکھارت | الطاف حسین حالی | .50 | چلتا مسافر | الطاف فاطمہ |
| .51 | برزخ | امجد اسلام امجد | .52 | عکس | امجد اسلام امجد |
| .53 | خواب جاگتے ہیں | امجد اسلام امجد | .54 | تاثرات | امجد اسلام امجد |
| .55 | اندر سبھا | امانت لکھنوی | .56 | صبح ازل | امیر مینائی |
| .57 | شام ابد | امیر مینائی | .58 | انارکلی | امتیاز علی تاج |
| .59 | چچا چھکن | امتیاز علی تاج | .60 | دن اور داستان | انتظار حسین |
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| .69 | اردو ادب کی تنقیدی تاریخ | انور سدید | .70 | زوال | انیس ناگی |
| .71 | دیوار کے پیچھے | انیس ناگی | .72 | الہلال | ابوالکلام آزاد |
| .73 | تذکرہ | ابوالکلام آزاد | .74 | غبار خاطر | ابوالکلام آزاد |
| 75 | دار و رسن | باقی صدیقی | 76 | زخم بہار | باقی صدیقی |

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| 77 | فٹ پاتھ کی گھاس | بانو قدسیہ | 78 | بہار بے خزاں | بانو قدسیہ |
| 79 | شہر بے مثال | بانو قدسیہ | 80 | پرواز | بانو قدسیہ |
| 81 | موم کی گلیاں | بانو قدسیہ | 82 | ایک دن | بانو قدسیہ |
| 83 | دانت کا دستہ | بانو قدسیہ | 84 | راجہ گدھ | بانو قدسیہ |
| 85 | چوگان ہستی | پریم چند منشی | 86 | بازار حسن | پریم چند منشی |
| 87 | سوز وطن | پریم چند منشی | 88 | بیوہ | پریم چند منشی |
| 89 | میدان عمل | پریم چند منشی | 90 | گئودان | پریم چند منشی |
| 91 | سلاسل | جان نثار اختر | 92 | آتش گل | جگر مراد آبادی |
| 93 | شعلہ طور | جگر مراد آبادی | 94 | پاکستانی کلچر | جگر مراد آبادی |
| 95 | ایلیٹ کے مضامین | جمیل جالبی | 96 | ارسطو سے ایلیٹ تک | جمیل جالبی |
| 97 | تاریخ ادب اردو | جمیل جالبی | 98 | خوشبو | پروین شاکر |
| 99 | انکار | پروین شاکر | 100 | ماہ تمام | پروین شاکر |
| 101 | روح ادب | جوش ملیح آبادی | 102 | شعلہ و شبنم | جوش ملیح آبادی |
| 103 | نقش و نگار | جوش ملیح آبادی | 104 | فکر و نشاط | جوش ملیح آبادی |
| 105 | یادوں کی برات | جوش ملیح آبادی | 106 | حرف و حکایت | جوش ملیح آبادی |
| 107 | تلاش بہاراں | جمیلہ ہاشمی | 108 | دشت سوس | جمیلہ ہاشمی |
| 109 | مردم دیدہ | چراغ حسن حسرت | 110 | کیلے کا چھلکا | چراغ حسن حسرت |
| 111 | پنجاب کا جغرافیہ | چراغ حسن حسرت | 112 | برگ آوارہ | حبیب جالب |
| 113 | ذکر بہتے خون کا | حبیب جالب | 114 | شاہ نامہ اسلام | حفیظ جالندھری |
| 115 | سوز و ساز | حفیظ جالندھری | 116 | نابینا علما | حبیب الرحمان خان شیروانی |
| 117 | اندھیرا خواب | حجاب امتیاز علی | 118 | صنوبر کے سائے | حجاب امتیاز علی |
| 119 | آخری فرعون | حکیم احمد شجاع | 120 | پنجاب کے سائے | حافظ محمود شیرانی |
| 121 | اردو زبان کی تاریخ | حافظ محمود شیرانی | 122 | مسافر کی ڈائری | خواجہ احمد عباس |
| 123 | غدر دہلی کے افسانے | خواجہ حسن نظامی | 124 | بیگمات کے آنسو | خواجہ حسن نظامی |
| 125 | سیپارہ دل | خواجہ حسن نظامی | 126 | تلاش گم شدہ | خدیجہ مستور |

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| 129 | آتش کدہ | ڈاکٹر محمد دین تاثیر | 130 | مباحث | ڈاکٹر سید عبداللہ |
| 131 | کلچر کا مسئلہ | ڈاکٹر سید عبداللہ | 132 | میرامن سے لیکر عبدالحق تک | ڈاکٹر سید عبداللہ |
| 133 | سرسید احمد اور ان کے نامور رفقا | ڈاکٹر سید عبداللہ | 134 | ولی سے اقبال تک | ڈاکٹر سید عبداللہ |
| 135 | اردو تنقید کا ارتقاء | ڈاکٹر عبارت بریلوی | 136 | لکھنؤ کا دبستان تنقید | ڈاکٹر ابواللیث صدیقی |
| 137 | بنات النعش | ڈپٹی نذیر احمد | 138 | توبتہ النصوح | ڈپٹی نذیر احمد |
| 139 | ابن الوقت | ڈپٹی نذیر احمد | 140 | مراۃ العروس | ڈپٹی نذیر احمد |
| 141 | رویائے صادقہ | ڈپٹی نذیر احمد | 142 | فسانہ مبتلا | ڈپٹی نذیر احمد |
| 143 | ایانی | ڈپٹی نذیر احمد | 144 | آب کوثر | ڈاکٹر شیخ محمد اکرم |
| 145 | رود کوثر | ڈاکٹر شیخ محمد اکرم | 146 | موج کوثر | ڈاکٹر شیخ محمد اکرم |
| 147 | اردو شاعر کا مزاج | ڈاکٹر وزیر آغا | 148 | کتابوں میں پھول رکھنا | ڈاکٹر حسن رضوی |
| 149 | خواب سہانے یاد آتے ہیں | ڈاکٹر حسن رضوی | 150 | پیارے پیارے | ڈاکٹر حسن رضوی |
| 151 | چینیوں کا سفر | ڈاکٹر حسن رضوی | 152 | درختوں پر نام لکھنا | ڈاکٹر حسن رضوی |
| 153 | صبح زندگی | راشد الخیری | 154 | شام زندگی | راشد الخیری |
| 155 | شب زندگی | راشد الخیری | 156 | نانی عشو | راشد الخیری |
| 157 | آبلہ پا | رضیہ فصیح احمد | 158 | متاع درد | رضیہ فصیح احمد |
| 159 | گاتا جائے بنجارا | ساحر لدھیانوی | 160 | تلخیاں | ساحر لدھیانوی |
| 161 | موسیٰ سے مارکس تک | سبط حسن | 162 | ذکر حافظ | سجاد ظہیر |
| 163 | لندن کی ایک رات | سجاد ظہیر | 164 | ہم نفسان رفتہ | رشید احمد صدیقی |
| 165 | گنج ہائے گراں مایہ | رشید احمد صدیقی | 166 | آشفتہ بیانی میری | رشید احمد صدیقی |
| 167 | خطبات احمدیہ | سرسید احمد خان | 168 | تاریخ سرکشی بجنور | سرسید احمد خان |
| 169 | رسالہ احکام طعام اہل کتاب | سرسید احمد خان | 170 | تبیین الکلام | سرسید احمد خان |
| 171 | تہذیب الاخلاق | سرسید احمد خان | 172 | آثار الصنادید | سرسید احمد خان |

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| 177 | گنجے فرشتے | سعادت حسن منٹو | 178 | یزید | سعادت حسن منٹو |
| 179 | نمرود کی خدائی | سعادت حسن منٹو | 180 | خالی بوتلیں | سعادت حسن منٹو |
| 181 | سڑک کے کنارے | سعادت حسن منٹو | 182 | سرکنڈوں کے پیچھے | سعادت حسن منٹو |
| 183 | خالی ڈبے | سعادت حسن منٹو | 184 | جنازے | سعادت حسن منٹو |
| 185 | کروٹ | سعادت حسن منٹو | 186 | سیاہ حاشیے | سعادت حسن منٹو |
| 187 | پھندنے | سعادت حسن منٹو | 188 | کالی شلوار | سعادت حسن منٹو |
| 189 | لاؤڈ سپیکر | سعادت حسن منٹو | 190 | ہتک | سعادت حسن منٹو |
| 191 | اودھ پنچ | سجاد حسین منشی | 192 | حاجی بغلول | سجاد حسین منشی |
| 193 | اردو ادب کی مختصر ترین تاریخ | ڈاکٹر سلیم اختر | 194 | اردو تنقید کا نفسیاتی دبستان | ڈاکٹر سلیم اختر |
| 195 | اقبال کا نفسیاتی مطالعہ | ڈاکٹر سلیم اختر | 196 | داستان سے افسانے تک | سید وقار عظیم |
| 197 | ہماری داستانیں | سید وقار عظیم | 198 | اقبال شاعر اور فلسفی | سید وقار عظیم |
| 199 | دریائے لطافت | سید انشاء اللہ خان انشاء | 200 | اردو کی آخری کتاب | سید انشاء اللہ خان انشاء |
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| 205 | کتابی چہرے | سید ضمیر جعفری | 206 | اترتے خاکے | سید ضمیر جعفری |
| 207 | ید بیضا | سید عابد علی عابد | 208 | اصول انتقاد ادبیات | سید عابد علی عابد |
| 209 | دفتر پریشان | شیخ امام بخش ناسخ | 210 | دفتر شعر | شیخ امام بخش ناسخ |
| 211 | مخزن | شیخ عبدالقادر | 212 | دو سفرنامے | شیخ عبدالقادر |
| 213 | دربار خلافت | شیخ عبدالقادر | 214 | سفرنامہ یورپ | شیخ عبدالقادر |
| 215 | حسن و عشق | شیخ قلندر بخش جرأت | 216 | موج تبسم | شوکت تھانوی |
| 217 | بحر تبسم | شوکت تھانوی | 218 | سیلاب تبسم | شوکت تھانوی |
| 219 | طوفان تبسم | شوکت تھانوی | 220 | کرنیں | شفیق الرحمن |
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| 227 | دیدودل | عارف عبدالمتین | 228 | آتش سیال | عارف عبدالمتین |
| 229 | صلیب غم | عارف عبدالمتین | 230 | محشر | عبدالحلیم شرر |
| 231 | دلگداز | عبدالحلیم شرر | 232 | فردوس بریں | عبدالحلیم شرر |
| 233 | حسن بن صباح | عبدالحلیم شرر | 234 | ملک عبدالعزیز ورجینیا | عبدالحلیم شرر |
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| 237 | اسرار خودی | علامہ اقبال | 238 | رموز بے خودی | علامہ اقبال |
| 239 | پیام مشرق | علامہ اقبال | 240 | زبور عجم | علامہ اقبال |
| 241 | علم الاقتصاد | علامہ اقبال | 242 | جاوید نامہ | علامہ اقبال |
| 243 | بانگ درا | علامہ اقبال | 244 | بال جبریل | علامہ اقبال |
| 245 | ضرب کلیم | علامہ اقبال | 246 | ارمغان حجاز | علامہ اقبال |
| 247 | شبنم | عزیز احمد | 248 | گریز | عزیز احمد |
| 249 | ایسی بلندی ایسی پستی | عزیز احمد | 250 | انقلاب | غلام رسول مہر |
| 251 | آنندی | غلام عباس | 252 | جاڑے کی چاندنی | غلام عباس |
| 253 | کن رس | غلام عباس | 254 | بیگموں کی چھیڑ چھاڑ | فراق دہلوی |
| 255 | رمزو کنایات | فراق گورکھ پوری | 256 | روح کائنات | فراق گورکھ پوری |
| 257 | نقش فریادی | فیض احمد فیض | 258 | زندان نامہ | فیض احمد فیض |
| 259 | دست صبا | فیض احمد فیض | 260 | دست تہ سنگ | فیض احمد فیض |
| 261 | سرِوادی سینا | فیض احمد فیض | 262 | میزان | فیض احمد فیض |
| 263 | متاع لوح وقلم | فیض احمد فیض | 264 | صلیبیں مرے دریچے میں | فیض احمد فیض |
| 265 | گفتگو | قتیل شفائی | 266 | جل ترنگ | قتیل شفائی |
| 267 | جھومر | قتیل شفائی | 268 | ہریالی | قتیل شفائی |
| 269 | روزن | قتیل شفائی | 270 | نقش فرنگ | قاضی عبدالغفار |
| 271 | میرے بھی صنم خانے | قرۃ العین حیدر | 272 | آگ کا دریا | قرۃ العین حیدر |
| 273 | کار جہاں دراز ہے | قرۃ العین حیدر | 274 | فسانہ آزاد | رتن ناتھ سرشار |

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| 277 | منزل شب | مختار صدیقی | 278 | شام اودھ | محمد احسن فاروقی |
| 279 | سنگم | محمد احسن فاروقی | 280 | جزیرے | محمد حسن عسکری |
| 281 | ستارہ اور بادبان | محمد حسن عسکری | 282 | اردو کی پہلی کتاب | محمد حسین آزاد |
| 283 | آب حیات | محمد حسین آزاد | 284 | نیرنگ خیال | محمد حسین آزاد |
| 285 | پس پردہ | مرزا ادیب | 286 | لہو اور قالین | مرزا ادیب |
| 287 | مٹی کا دیا | مرزا ادیب | 288 | معصوم | عصمت چغتائی |
| 289 | ٹیڑھی لکیر | عصمت چغتائی | 290 | ضدی | عصمت چغتائی |
| 291 | دوزخی | عصمت چغتائی | 292 | اداس نسلیں | عبداللہ حسین |
| 293 | نوطرز مرصع | عطا حسین خان تحسین | 294 | سب رس | ملا وجہی |
| 295 | دلی کا دبستان | نورالحسن | 296 | دکن میں اردو | نصیر الدین ہاشمی |
| 297 | فارسی کی پہلی کتاب | محمد حسین آزاد | 298 | عود ہندی خطوط | مرزا اسداللہ خان غالب |
| 299 | اردو معلی خطوط | مرزا اسداللہ خان غالب | 300 | قاطع برہان | مرزا اسداللہ خان غالب |
| 301 | مہر نیم روز | مرزا اسداللہ خان غالب | 302 | سبد چین | مرزا اسداللہ خان غالب |
| 303 | قادر نامہ | مرزا اسداللہ خان غالب | 304 | گل رعنا | مرزا اسداللہ خان غالب |
| 305 | دہلی کا ایک یادگار مشاعرہ | مرزا فرحت اللہ بیگ | 306 | مولوی نذیر احمد کی کہانی کچھ میری کچھ ان کی زبانی | مرزا فرحت اللہ بیگ |
| 307 | تاریخ فرشتہ | مرزا کاظم علی جوان | 308 | ماسکو | مستنصر حسین تارڑ |
| 309 | نکلے تری تلاش میں | مستنصر حسین تارڑ | 310 | اندلس میں اجنبی | مستنصر حسین تارڑ |
| 311 | پیار کا پہلا شہر | مستنصر حسین تارڑ | 312 | موازنہ انیس و دبیر | مولانا شبلی نعمانی |
| 313 | شعر العجم | مولانا شبلی نعمانی | 314 | الفاروق | مولانا شبلی نعمانی |
| 315 | سفر نامہ مصر، روم و شام | مولانا شبلی نعمانی | 316 | سوانح مولانا روم | مولانا شبلی نعمانی |
| 317 | علم الکلام | مولانا شبلی نعمانی | 318 | سیرۃ النعمان | مولانا شبلی نعمانی |
| 319 | المامون | مولانا شبلی نعمانی | 320 | الغزالی | مولانا عبدالمجید سالک |
| 321 | سیرۃ النبی | مولانا شبلی نعمانی | 322 | یاران کہن | مولانا ظفر علی خان |
| 323 | بہارستان | مولانا ظفر علی خان | 324 | نگارستان | |

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| 325 | معرکہ مذہب وسائنس | مولانا ظفر علی خان | 326 | خیابان فارس | مولانا ظفر علی خان |
| 327 | زمیندار | مولانا ظفر علی خان | 328 | ہماری زبان | مولوی عبدالحق |
| 329 | اردو کی نشوونما میں صوفیائے کرام کا حصہ | مولوی عبدالحق | 330 | چند ہم عصر | مولوی عبدالحق |
| 331 | گڑیا گھر | ممتاز مفتی | 332 | چپ | ممتاز مفتی |
| 333 | پہلی بارش | ناصر کاظمی | 334 | سرکی چھایا | ناصر کاظمی |
| 335 | ماورا | نذر محمد راشد | 336 | ایران میں اجنبی | نذر محمد راشد |
| 337 | محمد بن قاسم | نسیم حجازی | 338 | تلوار ٹوٹ گئی | نسیم حجازی |
| 339 | یوسف بن تاشفین | نسیم حجازی | 340 | خاک اور خون | نسیم حجازی |
| 341 | آخری چٹان | نسیم حجازی | 342 | سفید جزیرہ | نسیم حجازی |
| 343 | سو سال بعد | نسیم حجازی | 344 | داستان مجاہد | نسیم حجازی |
| 345 | گلزار داغ | نواب مرزا خان داغ | 346 | آفتاب داغ | نواب مرزا خان داغ |
| 347 | گلشن بے خار | نواب محمد مصطفی خان شیفتہ | 348 | شاعر کا انجام | نیاز فتح پوری |
| 349 | انتقادیات | نیاز فتح پوری | 350 | امریکا نو | اے حمید |
| 351 | لاہور کی یادیں | اے حمید | 352 | یادیں | اے حمید |
| 353 | زندگی | چوہدری افضل حق | 354 | دین اسلام | چوہدری افضل حق |
| 355 | علی پور کا ایلی | ممتاز مفتی | 356 | لبیک | ممتاز مفتی |
| 357 | الکھ نگری | ممتاز مفتی | 358 | پیاز کے چھلکے | ممتاز مفتی |
| 359 | غبارے | ممتاز مفتی | 360 | اک بے وفا کا شہر | ممتاز مفتی |
| 361 | تنہا پھول | منیر نیازی | 362 | جنگل میں دستک | منیر نیازی |
| 363 | دشمنوں کے درمیان شام | منیر نیازی | 364 | باغ و بہار | میر امن دہلوی |
| 365 | ذکر میر | میر تقی میر | 366 | نکات شعراء | میر تقی میر |
| 367 | خواب و خیال | میر تقی میر | 368 | ید بیضا | میر غلام علی آزاد بلگرامی |
| 369 | سحر البیان | میر حسن دہلوی | 370 | آرائش محفل | میر شیر علی افسوس |
| 371 | اخلاق ہندی | میر بہادر علی حسینی | 372 | برگ نے | ناصر کاظمی |
| 373 | پانی کے قیدی | انتظار حسین | 374 | علامتوں کا سفر | انتظار حسین |

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| 375 | ملاقاتیں | انتظار حسین | 376 | شائد | جون ایلیا |
| 377 | یعنی | جون ایلیا | 378 | فکر وخیال | انور سدید |
| 379 | اختلافات | انور سدید | 380 | نظم اور تجزیہ | انور سدید |
| 381 | کلیات شاہی | ابراہیم عادل شاہ | 382 | نورس | ابراہیم عادل شاہ |
| 383 | نوسر باز | اشرف بیابانی | 384 | شعری لسانیات | انیس ناگی |
| 385 | غالب ایک شاعر ایک اداکار | انیس ناگی | 386 | جل ترنگ | برہان الدین جانم |
| 387 | گلباس | برہان الدین جانم | 388 | نذر بتاں | جان نثار اختر |
| 389 | غم حسرت | جعفر علی شیون | 390 | جنون وحکمت | جوش ملیح آبادی |
| 391 | شاعری کی راتیں | جوش ملیح آبادی | 392 | سیف وسبو | جوش ملیح آبادی |
| 393 | تازہ پھول | جوش ملیح آبادی | 394 | روشنی کا مینار | جیلانی بانو |
| 395 | جگنو اور ستارے | جیلانی بانو | 396 | نغمے کا سفر | جیلانی بانو |
| 397 | اپنا اپنا جہنم | جمیلہ ہاشمی | 398 | پیام روح | حامد اللہ افسر میرٹھی |
| 399 | نورس | حامد اللہ افسر میرٹھی | 400 | دو ڈاکٹر | چراغ حسن حسرت |
| 401 | پربت کی بیٹی | چراغ حسن حسرت | 402 | حسن کی قیمت | حکیم احمد شجاع |
| 403 | زبیدہ | خواجہ احمد عباس | 404 | اندھیرا اجالا | یونس جاوید |
| 405 | باپ کا گناہ | حکیم احمد شجاع | 406 | بھارت کا لال | حکیم احمد شجاع |
| 407 | پاؤں میں پھول | خواجہ احمد عباس | 408 | بیوی کی تعلیم | خواجہ حسن نظامی |
| 409 | اولاد کی شادی | خواجہ حسن نظامی | 410 | چند روز | خدیجہ مستور |
| 411 | بوچھاڑ | خدیجہ مستور | 412 | کھیل | خدیجہ مستور |
| 413 | آنگن | خدیجہ مستور | 414 | تلاش گمشدہ | خدیجہ مستور |
| 415 | درد | خدیجہ مستور | 416 | کنول | ڈاکٹر محمد دین تاثیر |
| 417 | زاویہ | اشفاق احمد | 418 | مسائل اقبال | ڈاکٹر سید عبداللہ |
| 419 | تعبیر وتعمیر | ڈاکٹر سید عبداللہ | 420 | روایت کی اہمیت | ڈاکٹر عبارت بریلوی |
| 421 | شاعری کی تنقید | ڈاکٹر عبارت بریلوی | 422 | شاعر کی تنقید | ڈاکٹر عبارت بریلوی |
| 423 | جدید شاعری | ڈاکٹر عبارت بریلوی | 424 | پیغمبر اعظم وآخر | ڈاکٹر نصیر احمد ناصر |

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| 223 | مزید حماقتیں | شفیق الرحمن | 224 | جاہ وجلال | صوفی غلام مصطفیٰ تبسم |
| 225 | عظمت آدم | ظہیر کاشمیری | 226 | چراغ آخر شب | ظہیر کاشمیری |
| 227 | دیدودل | عارف عبدالمتین | 228 | آتش سیال | عارف عبدالمتین |
| 229 | صلیب غم | عارف عبدالمتین | 230 | محشر | عبدالحلیم شرر |
| 231 | دلگداز | عبدالحلیم شرر | 232 | فردوس بریں | عبدالحلیم شرر |
| 233 | حسن بن صباح | عبدالحلیم شرر | 234 | ملک عبدالعزیز ورجینیا | عبدالحلیم شرر |
| 235 | فلورانڈا | عبدالحلیم شرر | 236 | حسن انجلینا | عبدالحلیم شرر |
| 237 | اسرار خودی | علامہ اقبال | 238 | رموز بے خودی | علامہ اقبال |
| 239 | پیام مشرق | علامہ اقبال | 240 | زبور عجم | علامہ اقبال |
| 241 | علم الاقتصاد | علامہ اقبال | 242 | جاوید نامہ | علامہ اقبال |
| 243 | بانگ درا | علامہ اقبال | 244 | بال جبریل | علامہ اقبال |
| 245 | ضرب کلیم | علامہ اقبال | 246 | ارمغان حجاز | علامہ اقبال |
| 247 | شبنم | عزیز احمد | 248 | گریز | عزیز احمد |
| 249 | ایسی بلندی ایسی پستی | عزیز احمد | 250 | انقلاب | غلام رسول مہر |
| 251 | آنندی | غلام عباس | 252 | جاڑے کی چاندنی | غلام عباس |
| 253 | کن رس | غلام عباس | 254 | بیگموں کی چھیڑ چھاڑ | فراق دہلوی |
| 255 | رمزو کنایات | فراق گورکھ پوری | 256 | روح کائنات | فراق گورکھ پوری |
| 257 | نقش فریادی | فیض احمد فیض | 258 | زندان نامہ | فیض احمد فیض |
| 259 | دست صبا | فیض احمد فیض | 260 | دست تہ سنگ | فیض احمد فیض |
| 261 | سرِ وادی سینا | فیض احمد فیض | 262 | میزان | فیض احمد فیض |
| 263 | متاع لوح وقلم | فیض احمد فیض | 264 | صلیبیں مرے دریچے میں | فیض احمد فیض |
| 265 | گفتگو | قتیل شفائی | 266 | جل ترنگ | قتیل شفائی |
| 267 | جھومر | قتیل شفائی | 268 | ہریالی | قتیل شفائی |
| 269 | روزن | قتیل شفائی | 270 | نقش فرنگ | قاضی عبدالغفار |
| 271 | میرے بھی صنم خانے | قرۃ العین حیدر | 272 | آگ کا دریا | قرۃ العین حیدر |
| 273 | کار جہاں دراز ہے | قرۃ العین حیدر | 274 | فسانہ آزاد | رتن ناتھ سرشار |

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| 275 | ان داتا | قرۃ العین حیدر | 276 | لاجونتی | راجندر سنگھ بید |
| 277 | منزل شب | مختار صدیقی | 278 | شام اودھ | محمد احسن فاروقی |
| 279 | سنگم | محمد احسن فاروقی | 280 | جزیرے | محمد حسن عسکری |
| 281 | ستارہ اور بادبان | محمد حسن عسکری | 282 | اردو کی پہلی کتاب | محمد حسین آزاد |
| 283 | آب حیات | محمد حسین آزاد | 284 | نیرنگ خیال | محمد حسین آزاد |
| 285 | پس پردہ | مرزا ادیب | 286 | لہو اور قالین | مرزا ادیب |
| 287 | مٹی کا دیا | مرزا ادیب | 288 | معصوم | عصمت چغتائی |
| 289 | ٹیڑھی لکیر | عصمت چغتائی | 290 | ضدی | عصمت چغتائی |
| 291 | دوزخی | عصمت چغتائی | 292 | اداس نسلیں | عبداللہ حسین |
| 293 | نوطرز مرصع | عطا حسین خان تحسین | 294 | سب رس | ملا وجہی |
| 295 | دلی کا دبستان | نورالحسن | 296 | دکن میں اردو | نصیرالدین ہاشمی |
| 297 | فارسی کی پہلی کتاب | محمد حسین آزاد | 298 | عود ہندی خطوط | مرزا اسداللہ خان غالب |
| 299 | اردو معلیٰ خطوط | مرزا اسداللہ خان غالب | 300 | قاطع برہان | مرزا اسداللہ خان غالب |
| 301 | مہر نیم روز | مرزا اسداللہ خان غالب | 302 | سبد چین | مرزا اسداللہ خان غالب |
| 303 | قادر نامہ | مرزا اسداللہ خان غالب | 304 | گل رعنا | مرزا اسداللہ خان غالب |
| 305 | دہلی کا ایک یادگار مشاعرہ | مرزا فرحت اللہ بیگ | 306 | مولوی نذیر احمد کی کہانی کچھ میری کچھ ان کی زبانی | مرزا فرحت اللہ بیگ |
| 307 | تاریخ فرشتہ | مرزا کاظم علی جوان | 308 | ماسکو | مستنصر حسین تارڑ |
| 309 | نکلے تری تلاش میں | مستنصر حسین تارڑ | 310 | اندلس میں اجنبی | مستنصر حسین تارڑ |
| 311 | پیار کا پہلا شہر | مستنصر حسین تارڑ | 312 | موازنہ انیس و دبیر | مولانا شبلی نعمانی |
| 313 | شعرالعجم | مولانا شبلی نعمانی | 314 | الفاروق | مولانا شبلی نعمانی |
| 315 | سفرنامہ مصر، روم و شام | مولانا شبلی نعمانی | 316 | سوانح مولانا روم | مولانا شبلی نعمانی |
| 317 | علم الکلام | مولانا شبلی نعمانی | 318 | سیرۃ النعمان | مولانا شبلی نعمانی |
| 319 | المامون | مولانا شبلی نعمانی | 320 | الغزالی | مولانا شبلی نعمانی |
| 321 | سیرۃ النبی | مولانا شبلی نعمانی | 322 | یاران کہن | مولانا عبدالمجید سالک |
| 323 | بہارستان | مولانا ظفر علی خان | 324 | نگارستان | مولانا ظفر علی خان |

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| 325 | معرکہ مذہب وسائنس | مولانا ظفر علی خان | 326 | خیابان فارس | مولانا ظفر علی خان |
| 327 | زمیندار | مولانا ظفر علی خان | 328 | ہماری زبان | مولوی عبدالحق |
| 329 | اردو کی نشوونما میں صوفیائے کرام کا حصہ | مولوی عبدالحق | 330 | چند ہم عصر | مولوی عبدالحق |
| 331 | گڑیا گھر | ممتاز مفتی | 332 | چپ | ممتاز مفتی |
| 333 | پہلی بارش | ناصر کاظمی | 334 | سر کی چھایا | ناصر کاظمی |
| 335 | ماورا | نذر محمد راشد | 336 | ایران میں اجنبی | نذر محمد راشد |
| 337 | محمد بن قاسم | نسیم حجازی | 338 | تلوار ٹوٹ گئی | نسیم حجازی |
| 339 | یوسف بن تاشفین | نسیم حجازی | 340 | خاک اور خون | نسیم حجازی |
| 341 | آخری چٹان | نسیم حجازی | 342 | سفید جزیرہ | نسیم حجازی |
| 343 | سو سال بعد | نسیم حجازی | 344 | داستان مجاہد | نسیم حجازی |
| 345 | گلزار داغ | نواب مرزا خان داغ | 346 | آفتاب داغ | نواب مرزا خان داغ |
| 347 | گلشن بے خار | نواب محمد مصطفی خان شیفتہ | 348 | شاعر کا انجام | نیاز فتح پوری |
| 349 | انتقادیات | نیاز فتح پوری | 350 | امریکا نو | اے حمید |
| 351 | لاہور کی یادیں | اے حمید | 352 | یادیں | اے حمید |
| 353 | زندگی | چوہدری افضل حق | 354 | دین اسلام | چوہدری افضل حق |
| 355 | علی پور کا ایلی | ممتاز مفتی | 356 | لبیک | ممتاز مفتی |
| 357 | الکھ نگری | ممتاز مفتی | 358 | پیاز کے چھلکے | ممتاز مفتی |
| 359 | غبارے | ممتاز مفتی | 360 | اک بے وفا کا شہر | ممتاز مفتی |
| 361 | تنہا پھول | منیر نیازی | 362 | جنگل میں دستک | منیر نیازی |
| 363 | دشمنوں کے درمیان شام | منیر نیازی | 364 | باغ و بہار | میر امن دہلوی |
| 365 | ذکر میر | میر تقی میر | 366 | نکات شعراء | میر تقی میر |
| 367 | خواب و خیال | میر تقی میر | 368 | ید بیضا | میر غلام علی آزاد بلگرامی |
| 369 | سحر البیان | میر حسن دہلوی | 370 | آرائش محفل | میر شیر علی افسوس |
| 371 | اخلاق ہندی | میر بہادر علی حسینی | 372 | برگ نے | ناصر کاظمی |
| 373 | پانی کے قیدی | انتظار حسین | 374 | علامتوں کا سفر | انتظار حسین |

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| 375 | ملاقاتیں | انتظار حسین | 376 | شائد | جون ایلیا |
| 377 | یعنی | جون ایلیا | 378 | فکر و خیال | انور سدید |
| 379 | اختلافات | انور سدید | 380 | نظم اور تجزیہ | انور سدید |
| 381 | کلیات شاہی | ابراہیم عادل شاہ | 382 | نورس | ابراہیم عادل شاہ |
| 383 | نوسر باز | اشرف بیابانی | 384 | شعری لسانیات | انیس ناگی |
| 385 | غالب ایک شاعر ایک اداکار | انیس ناگی | 386 | جل ترنگ | برہان الدین جانم |
| 387 | گلباس | برہان الدین جانم | 388 | نذر بتاں | جان نثار اختر |
| 389 | غم حسرت | جعفر علی شیون | 390 | جنون و حکمت | جوش ملیح آبادی |
| 391 | شاعری کی راتیں | جوش ملیح آبادی | 392 | سیف و سبو | جوش ملیح آبادی |
| 393 | تازہ پھول | جوش ملیح آبادی | 394 | روشنی کا مینار | جیلانی بانو |
| 395 | جگنو اور ستارے | جیلانی بانو | 396 | نغمے کا سفر | جیلانی بانو |
| 397 | اپنا اپنا جہنم | جمیلہ ہاشمی | 398 | پیام روح | حامد اللہ افسر میرٹھی |
| 399 | نورس | حامد اللہ افسر میرٹھی | 400 | دو ڈاکٹر | چراغ حسن حسرت |
| 401 | پربت کی بیٹی | چراغ حسن حسرت | 402 | حسن کی قیمت | حکیم احمد شجاع |
| 403 | زبیدہ | خواجہ احمد عباس | 404 | اندھیرا اجالا | یونس جاوید |
| 405 | باپ کا گناہ | حکیم احمد شجاع | 406 | بھارت کا لال | حکیم احمد شجاع |
| 407 | پاؤں میں پھول | خواجہ احمد عباس | 408 | بیوی کی تعلیم | خواجہ حسن نظامی |
| 409 | اولاد کی شادی | خواجہ حسن نظامی | 410 | چند روز | خدیجہ مستور |
| 411 | بوچھاڑ | خدیجہ مستور | 412 | کھیل | خدیجہ مستور |
| 413 | آنگن | خدیجہ مستور | 414 | تلاش گمشدہ | خدیجہ مستور |
| 415 | درد | خدیجہ مستور | 416 | کنول | ڈاکٹر محمد دین تاثیر |
| 417 | زاویہ | اشفاق احمد | 418 | مسائل اقبال | ڈاکٹر سید عبداللہ |
| 419 | تعبیر و تعمیر | ڈاکٹر سید عبداللہ | 420 | روایت کی اہمیت | ڈاکٹر عبارت بریلوی |
| 421 | شاعری کی تنقید | ڈاکٹر عبارت بریلوی | 422 | شاعر کی تنقید | ڈاکٹر عبارت بریلوی |
| 423 | جدید شاعری | ڈاکٹر عبارت بریلوی | 424 | پیغمبر اعظم و آخر | ڈاکٹر نصیر احمد ناصر |